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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C07C 235/00</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 99/09000</b> <b>(43) International Publication Date:</b> 25 February 1999 (25.02.99)
<b>(21) International Application Number:</b> PCT/US98/17048 <b>(22) International Filing Date:</b> 18 August 1998 (18.08.98)  <b>(30) Priority Data:</b> 60/055,944 18 August 1997 (18.08.97) US 60/068,335 19 December 1997 (19.12.97) US  <b>(71) Applicant:</b> DU PONT PHARMACEUTICALS COMPANY [US/US]; WR-1ST18, 974 Centre Road, Wilmington, DE 19807 (US).  <b>(72) Inventors:</b> YAO, Wenqing; 748 Meadowbank Road, Kennett Square, PA 19348 (US). DECICCO, Carl, P.; 17 Ridgewood Turn Street, Newark, DE 19711 (US).  <b>(74) Agent:</b> KONRAD, Karen, H.; Du Pont Pharmaceuticals Com- pany, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).		<b>(81) Designated States:</b> AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
<b>(54) Title:</b> NOVEL INHIBITORS OF AGGREGANASE AND MATRIX METALLOPROTEINASES FOR THE TREATMENT OF ARTHRITIS  <b>(57) Abstract</b>  This invention relates to molecules which inhibit metalloproteinases, including aggrecanase, and the production of tumor necrosis factor (TNF). In particular, the compounds are inhibitors of metalloproteinases involved in tissue degradation and inhibitors of the release of tumor necrosis factor. The present invention also relates to pharmaceutical compositions comprising such compounds and to methods of using these compounds for the treatment of inflammatory diseases.		
<div style="text-align: right; padding-right: 50px;"><b>Atty. Docket No. 3589/1/US</b> <b>Serial No. 10/807,884</b> <b>Babiak et al.</b> <b>Reference 26</b></div> <div style="text-align: center; margin-top: 50px;"><b>EV 317349941 US</b></div>		

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TITLE

5 NOVEL INHIBITORS OF AGGRECANASE AND MATRIX  
METALLOPROTEINASES FOR THE TREATMENT OF ARTHRITIS

FIELD OF THE INVENTION

10 The present invention relates to novel molecules  
which inhibit metalloproteinases, including  
aggrecanase, and the production of tumor necrosis  
factor (TNF), pharmaceutical preparations containing  
them and to their use as pharmaceutical agents. In  
15 particular the compounds are inhibitors of  
metalloproteinases involved in tissue degradation and  
inhibitors of the release of tumor necrosis factor.

BACKGROUND OF THE INVENTION

20 There is now a body of evidence that  
metalloproteinases (MP) are important in the  
uncontrolled breakdown of connective tissue, including  
proteoglycan and collagen, leading to resorption of the  
25 extracellular matrix. This is a feature of many  
pathological conditions, such as rheumatoid and  
osteoarthritis, corneal, epidermal or gastric  
ulceration; tumor metastasis or invasion; periodontal  
disease and bone disease. Normally these catabolic  
30 enzymes are tightly regulated at the level of their  
synthesis as well as at their level of extracellular  
activity through the action of specific inhibitors,  
such as alpha-2-macroglobulins and TIMP (tissue  
inhibitor of metalloproteinase), which form inactive  
35 complexes with the MP's.

Osteo- and Rheumatoid Arthritis (OA and RA respectively) are destructive diseases of articular cartilage characterized by localized erosion of the cartilage surface. Findings have shown that articular  
5 cartilage from the femoral heads of patients with OA, for example, had a reduced incorporation of radiolabeled sulfate over controls, suggesting that there must be an enhanced rate of cartilage degradation in OA (Mankin et al. J. Bone Joint Surg. 52A, 1970,  
10 424-434). There are four classes of protein degradative enzymes in mammalian cells: serine, cysteine, aspartic and metalloproteinases. The available evidence supports that it is the metalloproteinases which are responsible for the degradation of the extracellular matrix of  
15 articular cartilage in OA and RA. Increased activities of collagenases and stromelysin have been found in OA cartilage and the activity correlates with severity of the lesion (Mankin et al. Arthritis Rheum. 21, 1978, 761-766, Woessner et al. Arthritis Rheum. 26, 1983, 63-  
20 68 and Ibid. 27, 1984, 305-312). In addition, aggrecanase (a newly identified metalloproteinase enzymatic activity) has been identified that provides the specific cleavage product of proteoglycan, found in RA and OA patients (Lohmander L.S. et al. Arthritis  
25 Rheum. 36, 1993, 1214-22).

Therefore metalloproteinases (MP) have been implicated as the key enzymes in the destruction of mammalian cartilage and bone. It can be expected that the pathogenesis of such diseases can be modified in a  
30 beneficial manner by the administration of MP inhibitors, and many compounds have been suggested for this purpose (see Wahl et al. Ann. Rep. Med. Chem. 25, 175-184, AP, San Diego, 1990).

This invention describes novel molecules that  
35 inhibit aggrecanase and other metalloproteinases. These novel molecules are provided as cartilage protecting



therapeutics. The inhibition of aggrecanase and other metalloproteinases by these novel molecules prevent the degradation of cartilage by these enzymes, thereby alleviating the pathological conditions of osteo- and  
5 rheumatoid arthritis.

Tumor necrosis factor (TNF) is a cell associated cytokine that is processed from a 26kD precursor form to a 17kD active form. TNF has been shown to be a primary mediator in humans and in animals, of  
10 inflammation, fever, and acute phase responses, similar to those observed during acute infection and shock. Excess TNF has been shown to be lethal. There is now considerable evidence that blocking the effects of TNF with specific antibodies can be beneficial in a variety  
15 of circumstances including autoimmune diseases such as rheumatoid arthritis (Feldman et al, Lancet, 1994, 344, 1105) and non-insulin dependent diabetes melitus. (Lohmander L.S. et al. Arthritis Rheum. 36, 1993, 1214-22) and Crohn's disease (Macdonald T. et al. Clin. Exp.  
20 Immunol. 81, 1990, 301) .

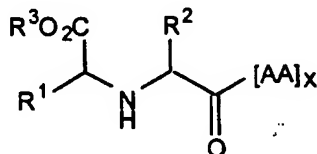
Compounds which inhibit the production of TNF are therefore of therapeutic importance for the treatment of inflammatory disorders. Recently it has been shown that a matrix metalloproteinase or family of  
25 metalloproteinases, hereafter known as TNF-convertases (TNF-C), as well as other MP's are capable of cleaving TNF from its inactive to active form (Gearing et al Nature, 1994, 370, 555). This invention describes novel molecules that inhibit this conversion and hence the  
30 secretion of active TNF- $\alpha$  from cells. These novel molecules provide a means of mechanism based therapeutic intervention for diseases including but not restricted to septic shock, haemodynamic shock, sepsis syndrome, post ischaemic reperfusion injury, malaria,  
35 Crohn's disease, inflammatory bowel diseases, mycobacterial infection, meningitis, psoriasis,

congestive heart failure, fibrotic diseases, cachexia,  
graft rejection, cancer, diseases involving  
angiogenesis, autoimmune diseases, skin inflammatory  
diseases, rheumatoid arthritis, multiple sclerosis,  
5 radiation damage, hyperoxic alveolar injury, HIV and  
non-insulin dependent diabetes melitus.

Since excessive TNF production has been noted in  
several disease conditions also characterized by MMP-  
mediated tissue degradation, compounds which inhibit  
10 both MMPs and TNF production may also have a particular  
advantage in diseases where both mechanisms are  
involved.

There are several patents which disclose  
hydroxamate and carboxylate based MMP inhibitors.  
15

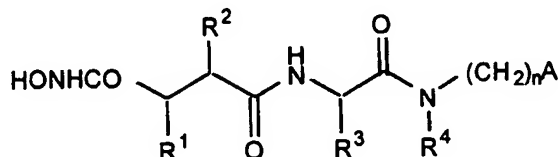
PCT International Publication No. WO 92/213260  
describes N-carboxyalkylpeptidyl compounds of general  
formula:



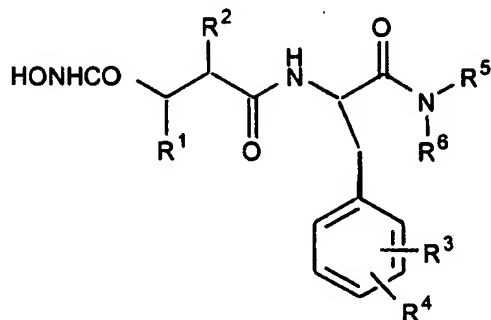
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wherein AA is an amino acid, as inhibitors of matrix  
metallproteinase mediated diseases.

PCT International Publication No. WO 90/05716  
discloses hydroxamic acid based collagenase inhibitors  
25 having the general formula:



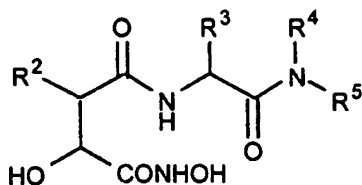
PCT International Publication No. WO 92/13831 describes related hydroxamic acids having collagenase inhibiting activity with the general formula:



5

PCT International Publication No. WO 94/02446 discloses metalloproteinase inhibitors which are natural amino acid derivatives of general formula:

10



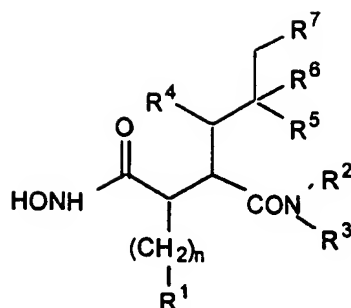
W095/09841 describes compounds that are hydroxamic acid derivatives and are inhibitors of cytokine production.

15

20

European Patent Application Publication No. 574,758 A1, discloses hydroxamic acid derivatives as collagenase inhibitors having the general formula:

25



GB 2 268 934 A and WO 94/24140 claim hydroxamate inhibitors of MMPs as inhibitors of TNF production.

5

The compounds of the current invention act as inhibitors of MPs, in particular aggrecanase and TNF-C, thereby preventing cartilage loss and destruction and inflammatory disorders involving TNF. The hydroxamic and carboxylic acids and derivatives contain a cyclic peptide mimic attached to a succinate peptide mimic, and thus the inhibitors are non-peptide in nature. A selection of these molecules are water soluble and are orally bioavailable.

15

#### SUMMARY OF THE INVENTION

This invention provides novel hydroxamic acids and carboxylic acids and derivatives thereof of formula (I) (described below) which are useful as inhibitors of metalloproteinases, such as aggrecanase and TNF-C. The present invention also includes pharmaceutical compositions comprising such compounds of formula (I) and methods of using such compounds for the treatment of arthritis and other inflammatory disorders as described previously, in a patient.

25

Also included in the present invention are pharmaceutical kits comprising one or more containers containing pharmaceutical dosage units comprising a compound of formula (I), for the treatment of arthritis

30

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and/or therapeutic agents for the treatment of arthritis and inflammation.

#### DEFINITIONS

5       The compounds herein described may have asymmetric centers. Compounds of the present invention containing an asymmetrically substituted atom may be isolated in optically active or racemic forms. It is well known in the art how to prepare optically active forms, such as  
10 by resolution of racemic forms or by synthesis from optically active starting materials. Many geometric isomers of olefins, C=N double bonds, and the like can also be present in the compounds described herein, and all such stable isomers are contemplated in the present  
15 invention. Cis and trans geometric isomers of the compounds of the present invention are described and may be isolated as a mixture of isomers or as separated isomeric forms. All chiral, diastereomeric, racemic forms and all geometric isomeric forms of a structure  
20 are intended, unless the specific stereochemistry or isomeric form is specifically indicated.

      The term "substituted," as used herein, means that any one or more hydrogens on the designated atom is replaced with a selection from the indicated group,  
25 provided that the designated atom's normal valency is not exceeded, and that the substitution results in a stable compound. When a substituent is keto (i.e., =O), then 2 hydrogens on the atom are replaced.

      When any variable (e.g., R<sup>b</sup>) occurs more than one  
30 time in any constituent or formula for a compound, its definition at each occurrence is independent of its definition at every other occurrence. Thus, for example, if a group is shown to be substituted with 0-2 R<sup>6</sup>, then said group may optionally be substituted with  
35 up to two R<sup>6</sup> groups and R<sup>6</sup> at each occurrence is selected independently from the definition of R<sup>6</sup>.

Also, combinations of substituents and/or variables are permissible only if such combinations result in stable compounds.

When a bond to a substituent is shown to cross a  
5 bond connecting two atoms in a ring, then such substituent may be bonded to any atom on the ring. When a substituent is listed without indicating the atom via which such substituent is bonded to the rest of the compound of a given formula, then such  
10 substituent may be bonded via any atom in such substituent. Combinations of substituents and/or variables are permissible only if such combinations result in stable compounds.

As used herein, "H" is intended to include  
15 substitutions with deuterium or tritium. Where "H" is not indicated but is part of a bond then substitutions with deuterium or tritium are also intended.

As used herein, "C<sub>1-10</sub> alkyl" or "C<sub>1-10</sub> alkylene" is intended to include both branched and straight-chain  
20 saturated aliphatic hydrocarbon groups having the specified number of carbon atoms, examples of which include, but are not limited to, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, sec-butyl, t-butyl, pentyl, and hexyl;

25 "Alkenyl" or "alkenylene" is intended to include hydrocarbon chains of either a straight or branched configuration and one or more unsaturated carbon-carbon bonds which may occur in any stable point along the chain, such as ethenyl, propenyl, and the like.

30 "Alkynyl" or "alkynylene" is intended to include hydrocarbon chains of either a straight or branched configuration and one or more carbon-carbon triple bonds which may occur in any stable point along the chain, such as ethynyl, propynyl, and the like.

35 As used herein, "aryl" or "aromatic residue" is intended to include phenyl or naphthyl as well as

commonly referred to "heterocycle" or "heteroaryl" or "heterocyclic" compounds.

As used herein the term "alkylaryl" represents an aryl group attached through an alkyl bridge.

5 "Halo" or "halogen" as used herein refers to fluoro, chloro, bromo, and iodo; and "counterion" is used to represent a small, negatively charged species such as chloride, bromide, hydroxide, acetate, sulfate, and the like.

10 As used herein, "carbocycle" or "carbocyclic residue" is intended to mean any stable 3- to 7-membered monocyclic or bicyclic or 7- to 13-membered bicyclic or tricyclic, any of which may be saturated, partially unsaturated, or aromatic. Examples of such  
15 carbocycles include, but are not limited to, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, adamantyl, cyclooctyl, [3.3.0]bicyclooctane, [4.3.0]bicyclononane, [4.4.0]bicyclodecane (decalin), [2.2.2]bicyclooctane,  
20 fluorenyl, phenyl, naphthyl, indanyl, adamantyl, or tetrahydronaphthyl (tetralin).

As used herein, the term "heterocycle" or "heterocyclic system" is intended to mean a stable 5- to 7- membered monocyclic or bicyclic or 7- to  
25 14-membered bicyclic heterocyclic ring which is saturated partially unsaturated or unsaturated (aromatic), and which consists of carbon atoms and from 1 to 4 heteroatoms independently selected from the group consisting of N, O and S and including any  
30 bicyclic group in which any of the above-defined heterocyclic rings is fused to a benzene ring. The nitrogen and sulfur heteroatoms may optionally be oxidized. The heterocyclic ring may be attached to its pendant group at any heteroatom or carbon atom which  
35 results in a stable structure. The heterocyclic rings described herein may be substituted on carbon or on a



nitrogen atom if the resulting compound is stable. If specifically noted, a nitrogen in the heterocycle may optionally be quaternized. It is preferred that when the total number of S and O atoms in the heterocycle exceeds 1, then these heteroatoms are not adjacent to one another. It is preferred that the total number of S and O atoms in the heterocycle is not more than 1.

As used herein, the term "aromatic heterocyclic system" is intended to mean a stable 5- to 7- membered monocyclic or bicyclic or 7- to 14-membered bicyclic heterocyclic aromatic ring which consists of carbon atoms and from 1 to 4 heteroatoms independently selected from the group consisting of N, O and S. It is preferred that the total number of S and O atoms in the aromatic heterocycle is not more than 1.

Examples of heterocycles include, but are not limited to, 1H-indazole, 2-pyrrolidinyl, 2H,6H-1,5,2-dithiazinyl, 2H-pyrrolyl, 3H-indolyl, 4-piperidinyl, 4aH-carbazole, 4H-quinolizinyl, 6H-1,2,5-thiadiazinyl, acridinyl, azocinyl, benzimidazolyl, benzofuranyl, benzothiofuranyl, benzothiophenyl, benzoxazolyl, benzthiazolyl, benztriazolyl, benztetrazolyl, benzisoxazolyl, benzisothiazolyl, benzimidazalonyl, carbazolyl, 4aH-carbazolyl, b-carbolinyl, chromanyl, chromenyl, cinnolinyl, decahydroquinolinyl, 2H,6H-1,5,2-dithiazinyl, dihydrofuro[2,3-b]tetrahydrofuran, furanyl, furazanyl, imidazolidinyl, imidazolyl, imidazolyl, 1H-indazolyl, indolenyl, indolinyl, indolizinyl, indolyl, isobenzofuranyl, isochromanyl, isoindazolyl, isoindolinyl, isoindolyl, isoquinolinyl, isothiazolyl, isoxazolyl, morpholinyl, naphthyridinyl, octahydroisoquinolinyl, oxadiazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolidinyl, oxazolyl,

oxazolidinylperimidinyl, phenanthridinyl,  
phenanthrolinyl, phenarsazinyl, phenazinyl,  
phenothiazinyl, phenoxathiinyl, phenoxazinyl,  
phthalazinyl, piperazinyl, piperidinyl, pteridinyl,  
5 piperidonyl, 4-piperidonyl, pteridinyl, purinyl,  
pyranyl, pyrazinyl, pyrazolidinyl, pyrazolinyl,  
pyrazolyl, pyridazinyl, pyridooxazole, pyridoimidazole,  
pyridothiazole, pyridinyl, pyridyl, pyrimidinyl,  
pyrrolidinyl, pyrrolinyl, pyrrolyl, quinazolinyl,  
10 quinolinyl, 4*H*-quinoliziny, quinoxaliny, quinoclidinyl, carbolinyl, tetrahydrofuranyl,  
tetrahydroisoquinolinyl, tetrahydroquinolinyl,  
6*H*-1,2,5-thiadiazinyl, 1,2,3-thiadiazolyl,  
1,2,4-thiadiazolyl, 1,2,5-thiadiazolyl,  
15 1,3,4-thiadiazolyl, thianthrenyl, thiazolyl, thienyl,  
thienothiazolyl, thienooxazolyl, thienoimidazolyl,  
thiophenyl, triazinyl, 1,2,3-triazolyl,  
1,2,4-triazolyl, 1,2,5-triazolyl, 1,3,4-triazolyl,  
xanthenyl. Preferred heterocycles include, but are not  
20 limited to, pyridinyl, furanyl, thienyl, pyrrolyl,  
pyrazolyl, imidazolyl, indolyl, benzimidazolyl,  
1*H*-indazolyl, oxazolidinyl, benzotriazolyl,  
benzisoxazolyl, oxindolyl, benzoxazolinyl, or  
isatinoyl. Also included are fused ring and spiro  
25 compounds containing, for example, the above  
heterocycles.

The term "amino acid" as used herein means an  
organic compound containing both a basic amino group  
and an acidic carboxyl group. Included within this  
30 term are natural amino acids (e.g., L-amino acids),  
modified and unusual amino acids (e.g., D-amino acids),  
as well as amino acids which are known to occur  
biologically in free or combined form but usually do  
not occur in proteins. Included within this term are  
35 modified and unusual amino acids, such as those  
disclosed in, for example, Roberts and Vellaccio (1983)

The Peptides, 5: 342-429, the teaching of which is hereby incorporated by reference. Natural protein occurring amino acids include, but are not limited to, alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, serine, threonine, tyrosine, tryptophan, proline, and valine. Natural non-protein amino acids include, but are not limited to arginosuccinic acid, citrulline, cysteine sulfinic acid, 3,4-dihydroxyphenylalanine, homocysteine, homoserine, ornithine, 3-moniodotyrosine, 3,5-diiodotyrosine, 3,5,5'-triiodothyronine, and 3,3',5,5'-tetraiodothyronine. Modified or unusual amino acids which can be used to practice the invention include, but are not limited to, D-amino acids, hydroxylysine, 4-hydroxyproline, an N-Cbz-protected amino acid, 2,4-diaminobutyric acid, homoarginine, norleucine, N-methylaminobutyric acid, naphthylalanine, phenylglycine,  $\beta$ -phenylproline, tert-leucine, 4-aminocyclohexylalanine, N-methyl-norleucine, 3,4-dehydroproline, N,N-dimethylaminoglycine, N-methylaminoglycine, 4-aminopiperidine-4-carboxylic acid, 6-aminocaproic acid, trans-4-(aminomethyl)-cyclohexanecarboxylic acid, 2-, 3-, and 4-(aminomethyl)-benzoic acid, 1-aminocyclopentanecarboxylic acid, 1-aminocyclopropanecarboxylic acid, and 2-benzyl-5-aminopentanoic acid.

The phrase "pharmaceutically acceptable" is employed herein to refer to those compounds, materials, compositions, and/or dosage forms which are, within the scope of sound medical judgment, suitable for use in contact with the tissues of human beings and animals without excessive toxicity, irritation, allergic

response, or other problem or complication,  
commensurate with a reasonable benefit/risk ratio.

As used herein, "pharmaceutically acceptable salts" refer to derivatives of the disclosed compounds wherein the parent compound is modified by making acid or base salts thereof. Examples of pharmaceutically acceptable salts include, but are not limited to, mineral or organic acid salts of basic residues such as amines; alkali or organic salts of acidic residues such as carboxylic acids; and the like. The pharmaceutically acceptable salts include the conventional non-toxic salts or the quaternary ammonium salts of the parent compound formed, for example, from non-toxic inorganic or organic acids. For example, such conventional non-toxic salts include those derived from inorganic acids such as hydrochloric, hydrobromic, sulfuric, sulfamic, phosphoric, nitric and the like; and the salts prepared from organic acids such as acetic, propionic, succinic, glycolic, stearic, lactic, malic, tartaric, citric, ascorbic, pamoic, maleic, hydroxymaleic, phenylacetic, glutamic, benzoic, salicylic, sulfanilic, 2-acetoxybenzoic, fumaric, toluenesulfonic, methanesulfonic, ethane disulfonic, oxalic, isethionic, and the like.

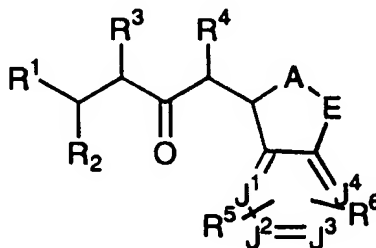
The pharmaceutically acceptable salts of the present invention can be synthesized from the parent compound which contains a basic or acidic moiety by conventional chemical methods. Generally, such salts can be prepared by reacting the free acid or base forms of these compounds with a stoichiometric amount of the appropriate base or acid in water or in an organic solvent, or in a mixture of the two; generally, nonaqueous media like ether, ethyl acetate, ethanol, isopropanol, or acetonitrile are preferred. Lists of suitable salts are found in *Remington's Pharmaceutical Sciences*, 17th ed., Mack Publishing Company, Easton,

PA, 1985, p. 1418, the disclosure of which is hereby incorporated by reference.

"Prodrugs" and "prodrug derivatives" are intended to include any covalently bonded carriers which release the active parent drug according to formula (I) *in vivo* when such prodrug is administered to a mammalian subject. Prodrugs of a compound of formula (I) are prepared by modifying functional groups present in the compound in such a way that the modifications are cleaved, either in routine manipulation or *in vivo*, to the parent compound. Prodrugs include compounds of formula (I) wherein a hydroxy, amino, or sulfhydryl group is bonded to any group that, when the prodrug or compound of formula (I) is administered to a mammalian subject, cleaves to form a free hydroxyl, free amino, or free sulfhydryl group, respectively. Examples of prodrugs include, but are not limited to, acetate, formate and benzoate derivatives of alcohol and amine functional groups in the compounds of formula (I), and the like.

"Stable compound" and "stable structure" are meant to indicate a compound that is sufficiently robust to survive isolation to a useful degree of purity from a reaction mixture, and formulation into an efficacious therapeutic agent.

[1] There is provided by this invention a compound of the formula (I):



Formula I

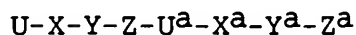
or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

5  $R^1$  is selected from:

-CO<sub>2</sub>H, -C(O)NHOH, -C(O)NHR<sup>7</sup>, -SH, -CH<sub>2</sub>CO<sub>2</sub>R<sup>7</sup>,  
-COR<sup>7</sup>, -N(OH)COR<sup>7</sup>, -SN<sub>2</sub>H<sub>2</sub>R<sup>7</sup>, -SONHR<sup>7</sup>, -CH<sub>2</sub>CO<sub>2</sub>H,  
-PO(OH)<sub>2</sub>, -PO(OH)NHR<sup>7</sup>, -CH<sub>2</sub>SH, -C(O)NHR<sup>7</sup>, -CO<sub>2</sub>R<sup>7</sup>,  
and common prodrug derivatives;

10

$R^2$  is selected from the formula:



15 wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
20 and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

25 Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14  
30 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O),  
35 C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,

$\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

5  $\text{X}^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

$\text{Y}^a$  is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and  $\text{C}(\text{O})$ ;

10  $\text{Z}^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $\text{R}^c$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $\text{R}^c$ ;

15

$\text{R}^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

20

$\text{R}^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

25

alternatively,  $\text{R}^a$  and  $\text{R}^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

30

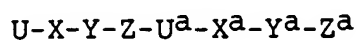
$\text{R}^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $\text{OR}^a$ , Cl, F, Br, I, =O, CN,  $\text{NO}_2$ ,  $\text{NR}^a\text{R}^{a'}$ ,  $\text{C}(\text{O})\text{R}^a$ ,  $\text{C}(\text{O})\text{OR}^a$ ,  $\text{C}(\text{O})\text{NR}^a\text{R}^{a'}$ ,  $\text{S}(\text{O})_2\text{NR}^a\text{R}^{a'}$ ,  $\text{S}(\text{O})_p\text{R}^a$ ,  $\text{CF}_3$ , and  $\text{CF}_2\text{CF}_3$ ;

35

$\text{R}^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $\text{OR}^a$ , Cl, F, Br, I, =O, CN,  $\text{NO}_2$ ,  $\text{NR}^a\text{R}^{a'}$ ,  $\text{C}(\text{O})\text{R}^a$ ,  $\text{C}(\text{O})\text{OR}^a$ ,  $\text{C}(\text{O})\text{NR}^a\text{R}^{a'}$ ,  $\text{NR}^a\text{S}(\text{O})_2\text{R}^{a'}$ ,  $\text{S}(\text{O})_2\text{NR}^a\text{R}^{a'}$ ,  $\text{S}(\text{O})_p\text{R}^a$ ,  $\text{CF}_3$ ,  $\text{CF}_2\text{CF}_3$ , and a 5-14

membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

5  $R^3$  is selected from the formula:



wherein:

10

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

15

X is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$  alkenylene,  $C_{2-10}$  alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
20  $C(O)$ ;

Z is absent or selected from H, a  $C_{3-13}$  carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4  
25 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
30  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

$x^a$  is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$  alkenylene,  $C_{2-10}$  alkynylene;

35



$y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

5  $z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

10  $R^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

15 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of  
20 N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  
25  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  
30  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

35  $R^4$  is selected from:  
hydrogen, (C<sub>1-5</sub>)alkyl, (C<sub>1-5</sub>)alkyl-aryl,

R<sup>5</sup> and R<sup>6</sup> are independently selected from:



5

wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
10 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

15

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
20 residue substituted with 0-5 R<sup>b</sup> and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5 R<sup>b</sup>;

25 U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O),  
C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

30 x<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

35

$Z^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>7</sup> is selected from: C<sub>1</sub>-C<sub>10</sub> alkyl, alkylaryl, and common prodrug derivatives

A is selected from:  
SO<sub>2</sub>, SO, CHOH;

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,

wherein W can be absent or selected from:

$CH_2$ , CO, O,  $S(O)_m$  and  $NR^{10}$ ,

m is 0-2,

5 n is 0-2;

with the proviso that when W is O, S or  $NR^{10}$  then  
m must not be 0;

10  $R^8$  and  $R^9$  is independently selected from:

H,

C1-C8 alkyl substituted with 0-5  $R^b$ ,

C1-C8 alkenyl,

C1-C8 alkylaryl substituted with 0-5  $R^b$ ,

15 C3-13 carbocyclic residue substituted with 0-5  $R^b$ ,

5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group

consisting of N, O, and S substituted with 0-5  $R^b$ ;  
amino,

20 C1-C8 alkyl- $NR^{10}$

hydroxyl,

$R^8$  and  $R^9$  can also form a ring interrupted by  $NR^{10}$ , O,  
 $S(O)_m$ .

25

$R^{10}$  is selected from:

hydrogen,

C1-C8 alkyl

30 C1-C8 alkylaryl

$J^1$ ,  $J^2$ ,  $J^3$ ,  $J^4$  are independently selected from:

CH, or N.

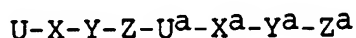
35 with no more than two N in the cycle.

[2] The present invention includes compounds of formula (I) wherein:

$R^1$  is selected from:

- 5        $-\text{CO}_2\text{H}$ ,  $-\text{C}(\text{O})\text{NHOH}$ ,  $-\text{C}(\text{O})\text{NHOR}^7$ ,  $-\text{SH}$ ,  $-\text{CH}_2\text{CO}_2\text{R}^7$ ,  
        $-\text{COR}^7$ ,  $-\text{N}(\text{OH})\text{COR}^7$ ,  $-\text{SN}_2\text{H}_2\text{R}^7$ ,  $-\text{SONHR}^7$ ,  $-\text{CH}_2\text{CO}_2\text{H}$ ,  
        $-\text{PO}(\text{OH})_2$ ,  $-\text{PO}(\text{OH})\text{NHR}^7$ ,  $-\text{CH}_2\text{SH}$ ,  $-\text{C}(\text{O})\text{NHOR}^7$ ,  $-\text{CO}_2\text{R}^7$ ,  
       and common prodrug derivatives;

- 10    $R^2$  is selected from the formula:



wherein:

15

U is absent or is selected from: O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  $\text{C}(\text{O})\text{O}$ ,  
 $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
 and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

20

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and

25

$\text{C}(\text{O})$ ;

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $\text{R}^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $\text{R}^b$ ;

30

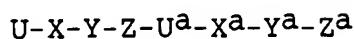
$\text{U}^a$  is absent or is selected from: H, O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  
 $\text{C}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 35    $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
       and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

- $x^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- 5  $y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and C(O);
- $z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14
- 10 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;
- $R^a$ , at each occurrence, is independently selected from
- 15 H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- $R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- 20 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;
- 25  $R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;
- 30 , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14
- 35 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of  
N, O, and S;

$R^3$  is selected from the formula:

5



wherein:

10 U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  
 $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
and  $NR^aSO_2NR^a$ ;

15 X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

20

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
25 N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ ,  $C(O)$ ,  
 $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
30 and  $NR^aSO_2NR^a$ ;

$x^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

35  $y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

5  $Z^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

10  $R^a$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

15 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

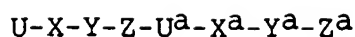
20  $R^b$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

25 , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4  
30 heteroatoms selected from the group consisting of N, O, and S;

$R^4$  is selected from:  
hydrogen,

35  $R^5$  and  $R^6$  are independently selected from:





wherein:

5

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

10

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and

15

C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

20

$U^a$  is absent or is selected from: H, O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

25

$x^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

30

$y^a$  is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

35

$z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^c$  and a 5-14 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

5 R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

10 alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

15 R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

20 R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic  
25 system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>7</sup> is selected from: C<sub>1</sub>-C<sub>10</sub> alkyl, alkylaryl, and common prodrug derivatives

30 A is selected from:  
SO<sub>2</sub>, SO, CHO;

E is (CR<sup>8</sup>R<sup>9</sup>)<sub>m</sub>-W-(CR<sup>8</sup>R<sup>9</sup>)<sub>n</sub>,

35 wherein W can be absent or selected from:  
CH<sub>2</sub>, CO, O, S(O)<sub>m</sub> and NR<sup>10</sup>,

m is 0-2,

n is 0-2;

5 with the proviso that when W is O, S or NR<sup>10</sup> then  
m must not be 0;

R<sup>8</sup> and R<sup>9</sup> is independently selected from:

H,  
C1-C8 alkyl substituted with 0-5 R<sup>b</sup>,  
10 C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,  
C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group  
15 consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;  
amino,  
C1-C8 alkyl-NR<sup>10</sup>  
hydroxyl,

20 R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)m.

R<sup>10</sup> is selected from:

hydrogen,  
25 C1-C8 alkyl  
C1-C8 alkylaryl

J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

30 with no more than two N in the cycle.

[3] The present invention includes preferred compounds  
of formula (I) wherein:

35 R<sup>1</sup> is selected from:

-CO<sub>2</sub>H, -C(O)NHOH, -C(O)NHO<sup>R7</sup>, -SH, -CH<sub>2</sub>CO<sub>2</sub>R<sup>7</sup>,

and common prodrug derivatives;

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
10       OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
      NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
      and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
15       alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
      C(O);

20    Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
      residue substituted with 0-5 R<sup>b</sup> and a 5-14  
      membered heterocyclic system containing from 1-4  
      heteroatoms selected from the group consisting of  
      N, O, and S substituted with 0-5 R<sup>b</sup>;

25       U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O),  
      C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
      NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
      and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

30       X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
      alkenylene, C<sub>2-10</sub> alkynylene;

      Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
35       C(O);

5       $Z^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

10     $R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

15      alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

20       $R^b$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

25       $R^C$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of  
30      N, O, and S;

$R^3$  is selected from the formula:



35

wherein:

- U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 5
- X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- 10
- Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);
- Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;
- 15
- U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 20
- X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- 25
- Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);
- 30
- Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;
- 35

$R^a$ , at each occurrence, is independently selected from  
H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

5  $R^{a'}$ , at each occurrence, is independently selected from  
H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

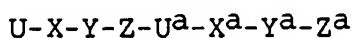
alternatively,  $R^a$  and  $R^{a'}$  taken together with the  
nitrogen to which they are attached form a 5 or 6  
membered ring containing from 0-1 additional  
10 heteroatoms selected from the group consisting of  
N, O, and S;

$R^b$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
15  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  
 $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^c$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
20  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  
 $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S;

25  $R^4$  is selected from:  
hydrogen,

$R^5$  and  $R^6$  are independently selected from:  
30



wherein:

35 U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  
 $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,

$\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

5 X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and  
 $\text{C}(\text{O})$ ;

10 Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $\text{R}^b$  and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5  $\text{R}^b$ ;

15  $\text{U}^a$  is absent or is selected from: H, O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  
 $\text{C}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

20  $\text{X}^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

25  $\text{Y}^a$  is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and  
 $\text{C}(\text{O})$ ;

30  $\text{Z}^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $\text{R}^c$  and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5  $\text{R}^c$ ;

$\text{R}^a$ , at each occurrence, is independently selected from  
H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

35



$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the  
 5 nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

10  $R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

15  $R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from  
 20 the group consisting of N, O, and S;

$R^7$  is selected from: C<sub>1-C10</sub> alkyl, alkylaryl, and common prodrug derivatives

25 A is selected from:  
 SO<sub>2</sub>, SO, CHOH;

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,

wherein W can be absent or selected from:

30 CH<sub>2</sub>, CO, O,  $S(O)_m$  and  $NR^{10}$ ,  
 m is 0-2,  
 n is 0-2;

with the proviso that when W is O, S or  $NR^{10}$  then  
 35 m must not be 0;

R<sup>8</sup> and R<sup>9</sup> is independently selected from:

- H,
- C1-C8 alkyl substituted with 0-5 R<sup>b</sup>,
- C1-C8 alkenyl,
- 5 C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,
- C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,
- 5-14 membered heterocyclic system containing from
- 1-4 heteroatoms selected from the group
- consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;
- 10 amino,
- C1-C8 alkyl-NR<sup>10</sup>
- hydroxyl,

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
15 S(O)<sub>m</sub>.

R<sup>10</sup> is selected from:

- hydrogen,
- C1-C8 alkyl
- 20 C1-C8 alkylaryl

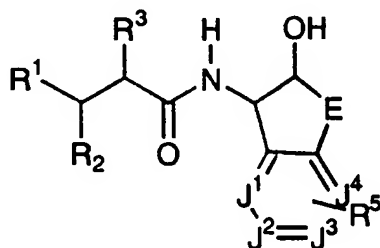
J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

. CH, or N.

with no more than two N in the cycle.

25

[4] There is provided by this invention preferred  
compounds of the formula (II):



30

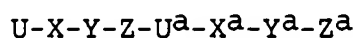
Formula II

or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

- 5  $R^1$  is selected from:  
 $-\text{CO}_2\text{H}$ ,  $-\text{C}(\text{O})\text{NHOH}$ ,  $-\text{C}(\text{O})\text{NHOR}^7$ ,  $-\text{SH}$ ,  $-\text{CH}_2\text{CO}_2\text{R}^7$ ,  
 and common prodrug derivatives;

$R^2$  is selected from the formula:

10



wherein:

- 15 U is absent or is selected from: O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  $\text{C}(\text{O})\text{O}$ ,  
 $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
 and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

- 20 X is absent or selected from H,  $\text{C}_1\text{-10}$  alkylene,  $\text{C}_2\text{-10}$   
 alkenylene,  $\text{C}_2\text{-10}$  alkynylene;

Y is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and  
 $\text{C}(\text{O})$ ;

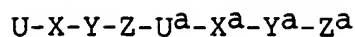
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Z is absent or selected from H, a  $\text{C}_3\text{-13}$  carbocyclic  
 residue substituted with 0-5  $\text{R}^b$  and a 5-14  
 membered heterocyclic system containing from 1-4  
 heteroatoms selected from the group consisting of  
 30 N, O, and S substituted with 0-5  $\text{R}^b$ ;

$\text{U}^a$  is absent or is selected from: H, O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  
 $\text{C}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
 35 and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

- $X^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- $Y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
5       C(O);
- $Z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4  
10       heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;
- $R^a$ , at each occurrence, is independently selected from  
15       H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- $R^{a'}$ , at each occurrence, is independently selected from  
      H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- alternatively,  $R^a$  and  $R^{a'}$  taken together with the  
20       nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;
- 25    $R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;
- 30    $R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
35       membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



5

wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  
 $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 10  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
 and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
 alkenylene, C<sub>2-10</sub> alkynylene;

15

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
 20 residue substituted with 0-5  $R^b$  and a 5-14  
 membered heterocyclic system containing from 1-4  
 heteroatoms selected from the group consisting of  
 N, O, and S substituted with 0-5  $R^b$ ;

25  $U^a$  is absent or is selected from: H, O,  $NR^a$ ,  $C(O)$ ,  
 $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
 and  $NR^aSO_2NR^a$ ;

30  $X^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
 alkenylene, C<sub>2-10</sub> alkynylene;

$Y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

35

5  $Z^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

10  $R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

15 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

20  $R^b$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

25  $R^C$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of  
30 N, O, and S;

$R^5$  is selected from:



35 wherein:

- U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 5 X is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;
- Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
10 C(O);
- Z is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4  
15 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;
- U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 20 X<sup>a</sup> is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;
- 25 Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);
- Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;
- 30 R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;
- 35

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

5 alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

10

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

15

R<sup>c</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic  
20 system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>7</sup> is selected from: C<sub>1</sub>-C<sub>10</sub> alkyl, alkylaryl, and common prodrug derivatives

25

E is (CR<sup>8</sup>R<sup>9</sup>)<sub>m</sub>-W-(CR<sup>8</sup>R<sup>9</sup>)<sub>n</sub>,

wherein W can be absent or selected from:

CH<sub>2</sub>, CO, O, S(O)<sub>m</sub> and NR<sup>10</sup>,

m is 0-2,

30

n is 0-2;

with the proviso that when W is O, S or NR<sup>10</sup> then m must not be 0;

35 R<sup>8</sup> and R<sup>9</sup> is independently selected from:

H,



- C1-C8 alkyl substituted with 0-5 R<sup>b</sup>,  
C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,  
C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
5 5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group  
consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;  
amino,  
C1-C8 alkyl-NR<sup>10</sup>  
10 hydroxyl,

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)<sub>m</sub>.

- 15 R<sup>10</sup> is selected from:

hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

- 20 J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

with no more than two N in the cycle.

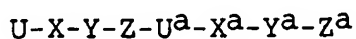
- [5] Preferred compounds of the present invention  
25 include compounds of formula (II) wherein:

R<sup>1</sup> is selected from:

-C(O)NHOH,  
and common prodrug derivatives;

30

R<sup>2</sup> is selected from the formula:



- 35 wherein:

- U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 5 X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
10 C(O);
- Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4  
15 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;
- U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
20 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- 25 Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);
- Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;
- 30 R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- 35

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

5 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

10

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

15

$R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

20

$R^3$  is selected from the formula:

25



wherein:

30 U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

35 X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

5 Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

10

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

15

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

20

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

25

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

30

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

35

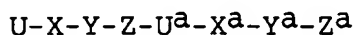
alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional

heteroatoms selected from the group consisting of  
N, O, and S;

5  $R^b$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA',  
S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

10  $R^c$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', NR<sup>a</sup>S(O)<sub>2</sub>RA',  
S(O)<sub>2</sub>NR<sup>a</sup>RA', S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
15 membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S;

$R^5$  is selected from:



20 wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
25 and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

30 Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14  
35 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

5 U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O),  
C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

10 X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

15 Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5 R<sup>c</sup> and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5 R<sup>c</sup>;

20

R<sup>a</sup>, at each occurrence, is independently selected from  
H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

25 R<sup>a'</sup>, at each occurrence, is independently selected from  
H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

30 alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the  
nitrogen to which they are attached form a 5 or 6  
membered ring containing from 0-1 additional  
heteroatoms selected from the group consisting of  
N, O, and S;

35 R<sup>b</sup>, at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA',  
S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>,  
C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>,  
5 S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic  
system containing from 1-4 heteroatoms selected from  
the group consisting of N, O, and S;

$R^7$  is selected from: C<sub>1-C10</sub> alkyl, alkylaryl, and common  
10 prodrug derivatives

E is (CR<sup>8</sup>R<sup>9</sup>)<sub>m</sub>-W-(CR<sup>8</sup>R<sup>9</sup>)<sub>n</sub>,

wherein W can be absent or selected from:

CH<sub>2</sub>, CO, O, S(O)<sub>m</sub> and NR<sup>10</sup>,

15 m is 0-2,

n is 0-2;

with the proviso that when W is O, S or NR<sup>10</sup> then  
m must not be 0;

20

R<sup>8</sup> and R<sup>9</sup> is independently selected from:

H,

C<sub>1-C8</sub> alkyl substituted with 0-5 R<sup>b</sup>,

C<sub>1-C8</sub> alkenyl,

25

C<sub>1-C8</sub> alkylaryl substituted with 0-5 R<sup>b</sup>,

C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup>,

5-14 membered heterocyclic system containing from

1-4 heteroatoms selected from the group

consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

30

amino,

C<sub>1-C8</sub> alkyl-NR<sup>10</sup>

hydroxyl,

35

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)<sub>m</sub>.

R<sup>10</sup> is selected from:

hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

5

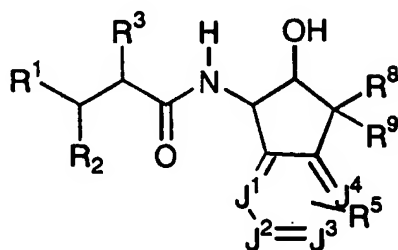
J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

with no more than two N in the cycle.

10

[6] More preferred compounds of the present invention are compounds of the formula (III):



15

Formula III

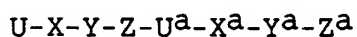
or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

20

R<sup>1</sup> is selected from:

-C(O)NHOH  
and common prodrug derivatives;

25 R<sup>2</sup> is selected from the formula:



wherein:

30



- U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- 5 X is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;
- Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
10 C(O);
- Z is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4  
15 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;
- U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
20 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;
- X<sup>a</sup> is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;
- 25 Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);
- Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4  
30 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;
- 35 R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

5 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

10

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

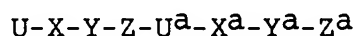
15

$R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

20

$R^3$  is selected from the formula:

25



wherein:

30 U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

35 X is absent or selected from H, C<sub>1-10</sub> alkylenes, C<sub>2-10</sub> alkenylenes, C<sub>2-10</sub> alkynylenes;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

5 Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

10

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

15

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
20 C(O);

20

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4  
25 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

30

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

35

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional

heteroatoms selected from the group consisting of  
N, O, and S;

5  $R^b$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA',  
S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

10  $R^c$ , at each occurrence, is independently selected from  
C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', NR<sup>a</sup>S(O)<sub>2</sub>RA',  
S(O)<sub>2</sub>NR<sup>a</sup>RA', S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
15 N, O, and S;

$R^5$  is selected from:

20 U-X-Y-Z-U<sup>a</sup>-X<sup>a</sup>-Y<sup>a</sup>-Z<sup>a</sup>

wherein:

25 U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

30 X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

35 Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14

membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

5 U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

10 X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

15

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of

20 N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

25 R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6

30 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

35 R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,

$\text{NR}^{\text{a}}\text{Ra}'$ ,  $\text{C}(\text{O})\text{Ra}$ ,  $\text{C}(\text{O})\text{ORa}$ ,  $\text{C}(\text{O})\text{NR}^{\text{a}}\text{Ra}'$ ,  $\text{S}(\text{O})_2\text{NR}^{\text{a}}\text{Ra}'$ ,  
 $\text{S}(\text{O})_{\text{p}}\text{Ra}$ ,  $\text{CF}_3$ , and  $\text{CF}_2\text{CF}_3$ ;

$\text{R}^{\text{c}}$ , at each occurrence, is independently selected from  
5  $\text{C}_{1-6}$  alkyl,  $\text{OR}^{\text{a}}$ ,  $\text{Cl}$ ,  $\text{F}$ ,  $\text{Br}$ ,  $\text{I}$ ,  $=\text{O}$ ,  $\text{CN}$ ,  $\text{NO}_2$ ,  $\text{NR}^{\text{a}}\text{Ra}'$ ,  
 $\text{C}(\text{O})\text{Ra}$ ,  $\text{C}(\text{O})\text{ORa}$ ,  $\text{C}(\text{O})\text{NR}^{\text{a}}\text{Ra}'$ ,  $\text{NR}^{\text{a}}\text{S}(\text{O})_2\text{Ra}'$ ,  $\text{S}(\text{O})_2\text{NR}^{\text{a}}\text{Ra}'$ ,  
 $\text{S}(\text{O})_{\text{p}}\text{Ra}$ ,  $\text{CF}_3$ ,  $\text{CF}_2\text{CF}_3$ , and a 5-14 membered heterocyclic  
system containing from 1-4 heteroatoms selected from  
the group consisting of N, O, and S;

10

$\text{R}^8$  and  $\text{R}^9$  is independently selected from:

H,  
C1-C8 alkyl substituted with 0-5  $\text{R}^{\text{b}}$ ,  
C1-C8 alkenyl,  
15 C1-C8 alkylaryl substituted with 0-5  $\text{R}^{\text{b}}$ ,  
C3-13 carbocyclic residue substituted with 0-5  $\text{R}^{\text{b}}$ ,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group  
consisting of N, O, and S substituted with 0-5  $\text{R}^{\text{b}}$ ;  
20 amino, C1-C8 alkyl- $\text{NR}^{10}$   
hydroxyl,

$\text{R}^8$  and  $\text{R}^9$  can also form a ring interrupted by  $\text{NR}^{10}$ , O,  
 $\text{S}(\text{O})_{\text{m}}$ .

25

$\text{R}^{10}$  is selected from:

hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

30

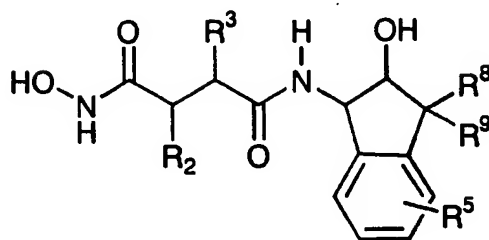
$\text{J}^1$ ,  $\text{J}^2$ ,  $\text{J}^3$ ,  $\text{J}^4$  are independently selected from:

CH, or N.

with no more than two N in the cycle.

35

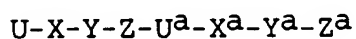
[7] The more preferred compounds provided by this invention are compounds of the formula (IV):



Formula IV

or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$  alkenylene,  $C_{2-10}$  alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

Z is absent or selected from H, a  $C_{3-13}$  carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

5 U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

10 X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

15 Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

20

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

25 R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

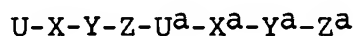
alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional  
30 heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
35 NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA', S(O)<sub>p</sub>RA', CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;



$R^C$ , at each occurrence, is independently selected from  
 C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  
 NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>,  
 5 S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
 membered heterocyclic system containing from 1-4  
 heteroatoms selected from the group consisting of  
 N, O, and S;

10  $R^3$  is selected from the formula:



wherein:

15

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
 OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
 and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

20

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
 alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
 25 C(O);

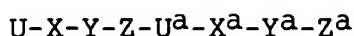
Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
 residue substituted with 0-5 R<sup>b</sup> and a 5-14  
 membered heterocyclic system containing from 1-4  
 30 heteroatoms selected from the group consisting of  
 N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O),  
 C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
 35 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
 and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

- $X^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;
- 5  $Y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and C(O);
- $Z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14  
10 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;
- $R^a$ , at each occurrence, is independently selected from  
15 H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- $R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;
- 20 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;
- 25  $R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;
- 30  $R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14  
35 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of  
N, O, and S;

5  $R^5$  is selected from:



wherein:

10

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  
 $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
and  $NR^aSO_2NR^a$ ;

15

X is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$   
alkenylene,  $C_{2-10}$  alkynylene;

20

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

25

Z is absent or selected from H, a  $C_{3-13}$  carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5  $R^b$ ;

30

$U^a$  is absent or is selected from: H, O,  $NR^a$ ,  $C(O)$ ,  
 $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
and  $NR^aSO_2NR^a$ ;

35

$x^a$  is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$   
alkenylene,  $C_{2-10}$  alkynylene;

$y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

5  $z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

10  $R^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

15 alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of  
20 N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  
25  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  
30  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^8$  and  $R^9$  is independently selected from:  
35 H,  
C<sub>1-8</sub> alkyl substituted with 0-5  $R^b$ ,

C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,  
C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
5 5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group  
consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;  
amino, C1-C8 alkyl-NR<sup>10</sup>  
hydroxyl,

10 R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)<sub>m</sub>.

R<sup>10</sup> is selected from:  
hydrogen,  
15 C1-C8 alkyl  
C1-C8 alkylaryl

[8] Most preferred compounds of the present invention  
include compounds selected from the group consisting  
20 of:

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-  
isobutyl-butanediamide;

25 N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-  
isobutyl-3(S)-(5-hydroxycarbonyl)-pentanamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-  
isobutyl-3(S)-methyl-butanediamide;

30 N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-  
isobutyl-3(S)-propyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-hexyl-  
35 3(S)-propyl-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-hydroxy-phenyl)methyl]butanediamide;

5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-methoxy-phenyl)methyl]butanediamide;

N1-[1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;

10

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-phenyl-propyl]butanediamide;

15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy)-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(benzyloxy)-phenyl)methyl]butanediamide;

20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(fluoro-phenyl)methyl]butanediamide;

25

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3,4-(methylenedioxy-phenyl)methyl]butanediamide;

30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(methoxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tert-butylaminosulfonyl-phenyl)phenyl)methyl]-butanediamide;

- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(phenyl)phenyl)methyl]butanediamide;

10

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[(3-hydroxy-4-methoxy-phenyl)methyl]butanediamide;

- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(3-thiophene)isoxazoline)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-chloro-phenyl)phenyl)methyl]butanediamide;

- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-benzofuran)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methyl-phenyl)phenyl)methyl]butanediamide;

25

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3,4-(methylenedioxy-phenyl)phenyl)methyl]butanediamide;

- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tetrazole-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-phenyl)phenyl)methyl]butanediamide;

- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-methyl-phenyl)phenyl)methyl]butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(amino-phenyl)methyl]butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy-carbonyl)amino]phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-hydroxymethylene)phenyl)phenyl)methyl]butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4,5-trimethoxy-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-
- 15 (2,4-di-methoxy-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-
- (3,5-di-chloro-phenyl)phenyl)methyl]butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-
- isopropyl-phenyl)phenyl)methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-
- (2,4-dichloro-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-
- 30 chloro-4-fluoro-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(p-
- toluenesulfonyl-amino)phenyl)methyl]butanediamide;



- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4-methylenedioxyphenyl)phenyl]methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-methoxyphenyl)phenyl]methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-fluorophenyl)phenyl]methyl]butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(fluoro-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-nitrophenyl)phenyl]methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-(methylsulfonyl-amino)-phenyl)phenyl]methyl]-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-trimethylsilyl-propyl)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propionamido)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(ethyloxy-carbonyl-amino)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-butyloxy-carbonyl-amino)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(propionamido)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(methylsulfonyl-amino)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(methylsulfonylamino)-phenyl)methyl]-butanediamide;
- N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-butanediamide;
- 35 N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-(5-hydroxycarbonyl)-pentanamide;

- N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-methyl-butanediamide;
- 5 N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-propyl-butanediamide;
- N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-hexyl-3(S)-propyl-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-hydroxy-phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-methoxy-phenyl)methyl]butanediamide;
- 15 N1-[1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-phenyl-propyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy)-phenyl)methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(benzyloxy)-phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(fluoro-phenyl)methyl]butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3,4-(methylenedioxy-phenyl)methyl]butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(methoxy-phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tert-butylaminosulfonyl-phenyl)phenyl)methyl]butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methoxy-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(phenyl)phenyl)methyl]butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[(3-hydroxy-4-methoxy-phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(3-thiophene)isoxazoline)methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-chloro-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-benzofuran)phenyl)methyl]butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methyl-phenyl)phenyl)methyl]butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3,4-(methylenedioxy-phenyl)phenyl)methyl]butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tetrazole-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-phenyl)phenyl)methyl]butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-methyl-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(amino-phenyl)methyl]butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy-carbonyl)amino]phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-hydroxymethylene)phenyl)phenyl)methyl]butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4,5-trimethoxy-phenyl)phenyl)methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-di-methoxy-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,5-di-chloro-phenyl)phenyl)methyl]butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-isopropyl-phenyl)phenyl)methyl]butanediamide;
- 35

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-dichloro-phenyl)phenyl)methyl]butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-chloro-4-fluoro-phenyl)phenyl)methyl]butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(p-toluenesulfonyl-amino)phenyl)methyl]butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4-methylenedioxyphenyl)phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-methoxyphenyl)phenyl)methyl]butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-fluorophenyl)phenyl)methyl]butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(fluoro-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-nitrophenyl)phenyl)methyl]butanediamide;
- 35

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-(methylsulfonyl-amino)-phenyl)phenyl)methyl]butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-trimethylsilyl-propyl)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propionamido)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(ethyloxy-carbonyl-amino)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-butyloxy-carbonyl-amino)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(methylsulfonyl-amino)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-amino-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclobutane carboxamido-1-yl)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-hydroxymethyl-isobutanamide)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-hydroxyl-cyclopropane carboxamido-1-yl)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-phenyl-cyclopropane carboxamido-1-yl)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzene carboxamido-1-yl)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-phenyl-cyclopentane carboxamido-1-yl)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclohexane carboxamido-1-yl)-butanediamide;



- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-indole carboxamido)-butanediamide;
- 5
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-furan carboxamido)-butanediamide;
- 10
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-quinoline carboxamido)-butanediamide;
- 15
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3,4,5-trimethoxy benzene carboxamido-1-yl)-butanediamide;
- 20
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-3-amino-benzene carboxamido-1-yl)-butanediamide;
- 25
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-6-amino-benzene carboxamido-1-yl)-butanediamide;
- 30
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-(2,4-dichloro-phenyl)-cyclopropane carboxamido-1-yl)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-(4-chloro-phenyl)-cyclopropane carboxamido-1-yl)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-cyano-benzene carboxamido-1-yl)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(6-quinoline carboxamido)-butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-ethyl,3-methyl-pyrazole 5-carboxamido)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3-(4-morpholino-benzene carboxamido-1-yl)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-chloro-4-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(imidazol-1-yl)benzene carboxamido-1-yl)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-thiophene carboxamido-1-yl)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-tert-butyl,3-methyl-pyrazole 5- carboxamido)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-aminomethyl benzene carboxamido-1-yl)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-hydroxyl-isobutanamido)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopropane carboxamido-1-yl)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopentane carboxamido-1-yl)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclohexane carboxamido-1-yl)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(4-N-Boc-piperazinyl-1-yl)benzene carboxamido-1-yl)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(piperazinyl-1-yl)benzene carboxamido-1-yl)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-Fluoro-6-chloro-benzene carboxamido-1-yl)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-amino-cyclohexane carboxamido-1-yl)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylthio-acetamido)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methoxy-acetamido)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-allyl-cyclopentane carboxamido-1-yl)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-n-propyl-cyclopentane carboxamido-1-yl)-butanediamide;
- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-allyl-cyclopropane carboxamido-1-yl)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(8-quinoline-sulfonamido)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-nitro-benzene sulfonamido)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1,4-di-methyl-2-chloro-pyrazole-3- sulfonamido)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1,5-dimethyl-isooxazole 3- sulfonamido)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-imidazole 3- sulfonamido)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzene sulfonamido)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylsulfonyl benzene sulfonamido-1-yl)-butanediamide;

- N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclohexylamino)-butanediamide;
- 5 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-propylamino)-butanediamide;
- 10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4(2-trifluoromethylphenyl)-phenylmethyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;
- 15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopentylamino)-butanediamide;
- 20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopropylmethyl)-butanediamide;
- 25 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzylamino)-butanediamide;
- 30 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-4-methylphenyl)methyl]-3(S)-(3-cyanophenylmethylamino)-butanediamide;
- 35 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-pentylamino)-butanediamide;

5

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(bis-cyclopropylmethyamino)-butanediamide;

10 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-thiophenemethylamino)-butanediamide;

15 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-propylamino)-butanediamide;

20 N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;

The present invention also provides a pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of formula (I) as described herein.

25 The present invention also provides for treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of formula (I) as described herein.

35 The present invention also provides a method for treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising

administering to the mammal in need of such treatment a therapeutically effective amount of a compound of formula (I) as described herein.

5           The present invention also provides a method for treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by  
10 secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of formula (I) as described herein.

15           The present invention also provides a method for treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia,  
20 alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of  
25 formula (I) as described herein.

In the following description a (-) symbolizes the point of attachment.

30

#### SYNTHESIS

The novel compounds of the present invention may be prepared in a number of ways well known to one  
35 skilled in the art of organic synthesis. The compounds of the present invention can be synthesized using the methods described below, together with synthetic methods known in the art of synthetic organic



chemistry, or variations thereon as appreciated by those skilled in the art. Preferred methods include, but are not limited to, those described below. All references cited herein are hereby incorporated in  
5 their entirety herein by reference.

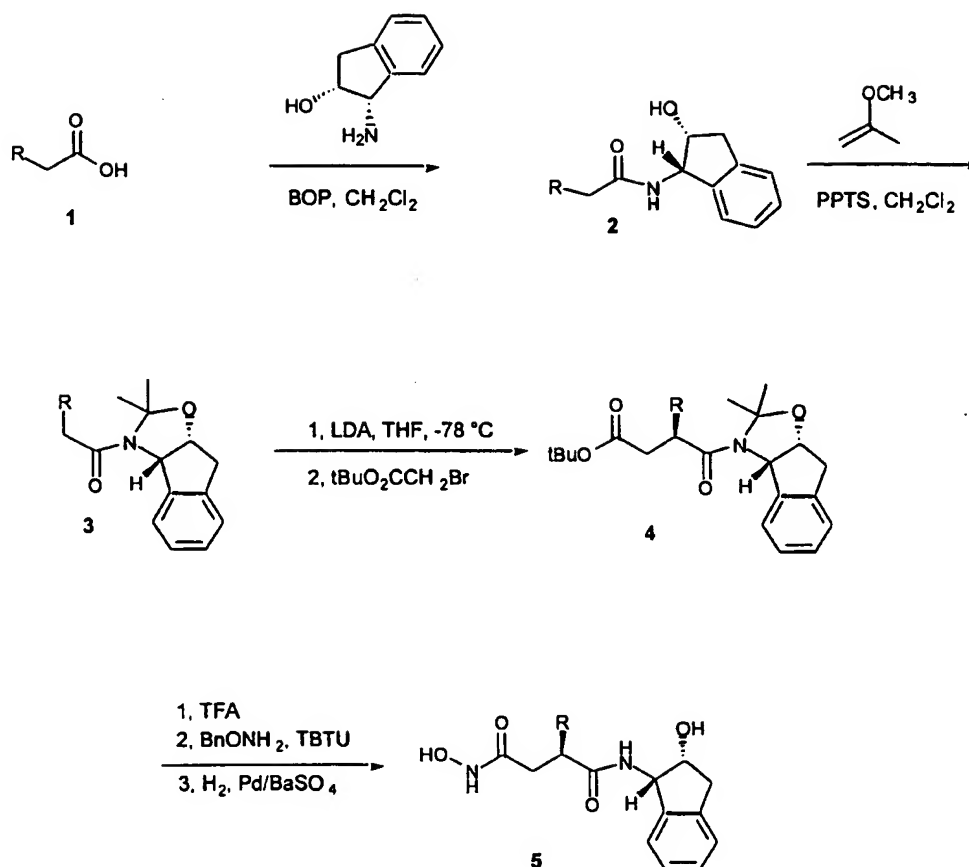
The novel compounds of this invention may be prepared using the reactions and techniques in this section. The reactions are performed in solvents appropriate to the reagents and materials employed and  
10 suitable for the transformation being effected. Also, in the description of the synthetic methods described below, it is to be understood that all proposed reaction conditions, including choice of solvents, reaction temperature, duration of the experiment and  
15 workup procedures, are chosen to be the conditions standard for that reaction, which should be readily recognized by one skilled in the art. It is understood by one skilled in the art of organic synthesis that the functionality present on various portions of the  
20 molecule must be compatible with the reagents and reactions proposed. Such restrictions to the substituents which are compatible with the reaction conditions will be readily apparent to one skilled in the art and alternate methods must then be used.

25 A series of compounds of formula 5 are prepared by the methods outlined in scheme 1. Coupling of carboxylic acid 1 with cis-(1S,2R-(-)-1-amino-2-indanol provided amide 2. The hydroxyl group of 2 was protected as the acetonide 3, followed by alkylation with tert-  
30 butyl 2-bromo-acetate to afford the desired diastereomer 4. Removal of the tert-butyl group of 4 with TFA in methylene chloride, followed by coupling with O-benzyl hydroxy amine, and hydrogenation afforded the target molecule 5.

35

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Scheme 1



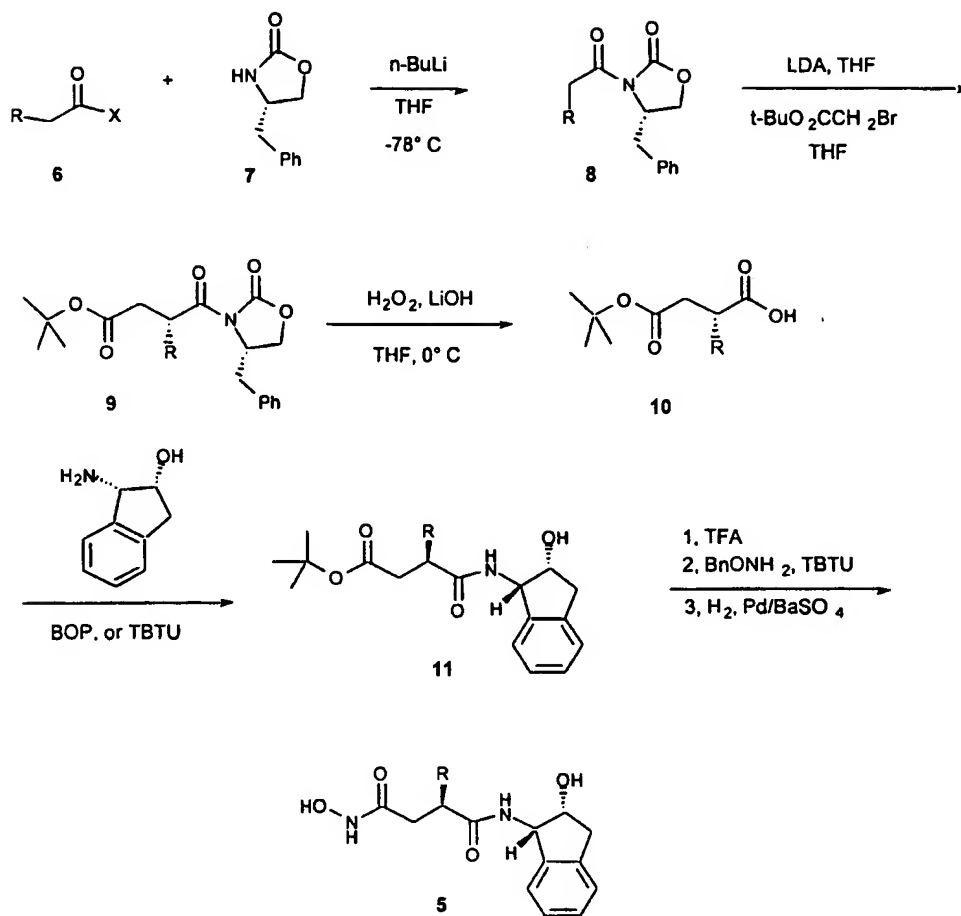
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Compounds of formula 5 can also be prepared by the methods outlined in scheme 2. The 2-substituted succinic acid **10** can be prepared using standard Evans chemistry. An acid **6** ( $\text{X} = \text{Cl}$ ) is converted to its oxazolidinone derivative **8** using the standard chemistry. Asymmetric alkylation, followed by hydrolysis using  $\text{H}_2\text{O}_2/\text{LiOH}$  afforded the desired acid **10**. The mono-protected succinic acid was coupled to  $(1S, 2R)\text{-}(-)\text{-cis-1-amino-2-indanol}$  using standard BOP, or other peptide coupling reagents such as DCC, EDAC, TBTU. The intermediate **11** can then be readily converted into the target compounds **5** using the similar

5 procedures to that used for the synthesis of target 5 as described in scheme 1.

Scheme 2

10

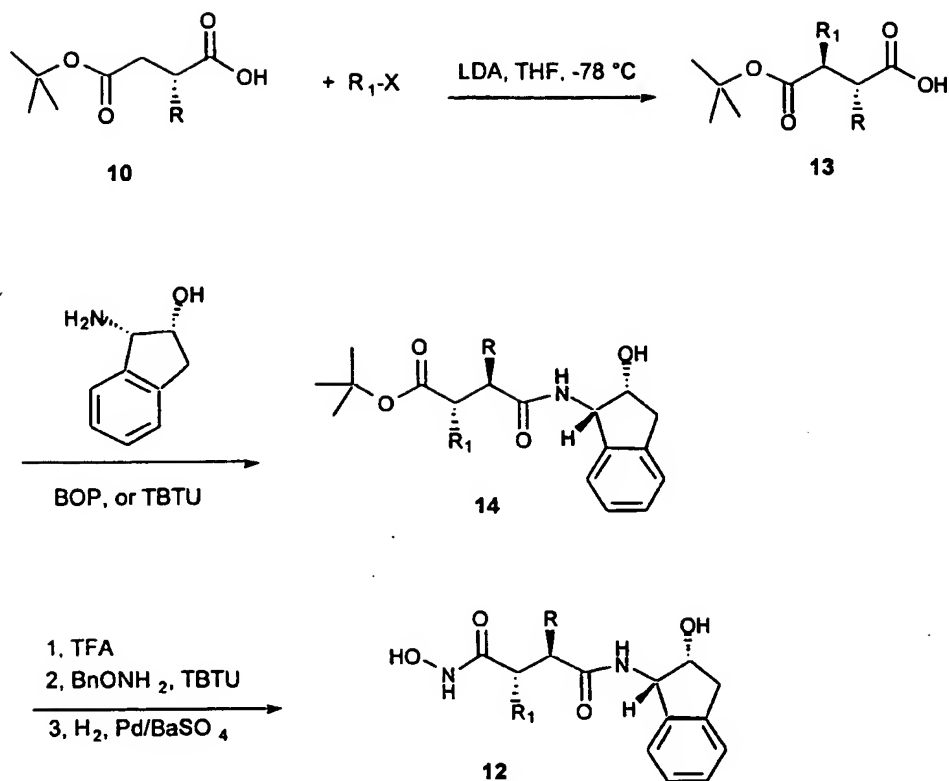


15 Compounds of formula 12 are prepared by the methods outlined in scheme 3. Dianion reaction of the intermediate 10 with an organic halides or triflates produces the 2,3-disubstituted succinate 13. The acid 13 was coupled with cis -(1S, 2R)-(-)-1-amino-2-indanol. Following similar procedures to that used for the synthesis of target 5 as described in scheme 1, compounds of formula 12 can be readily prepared.

20

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Scheme 3



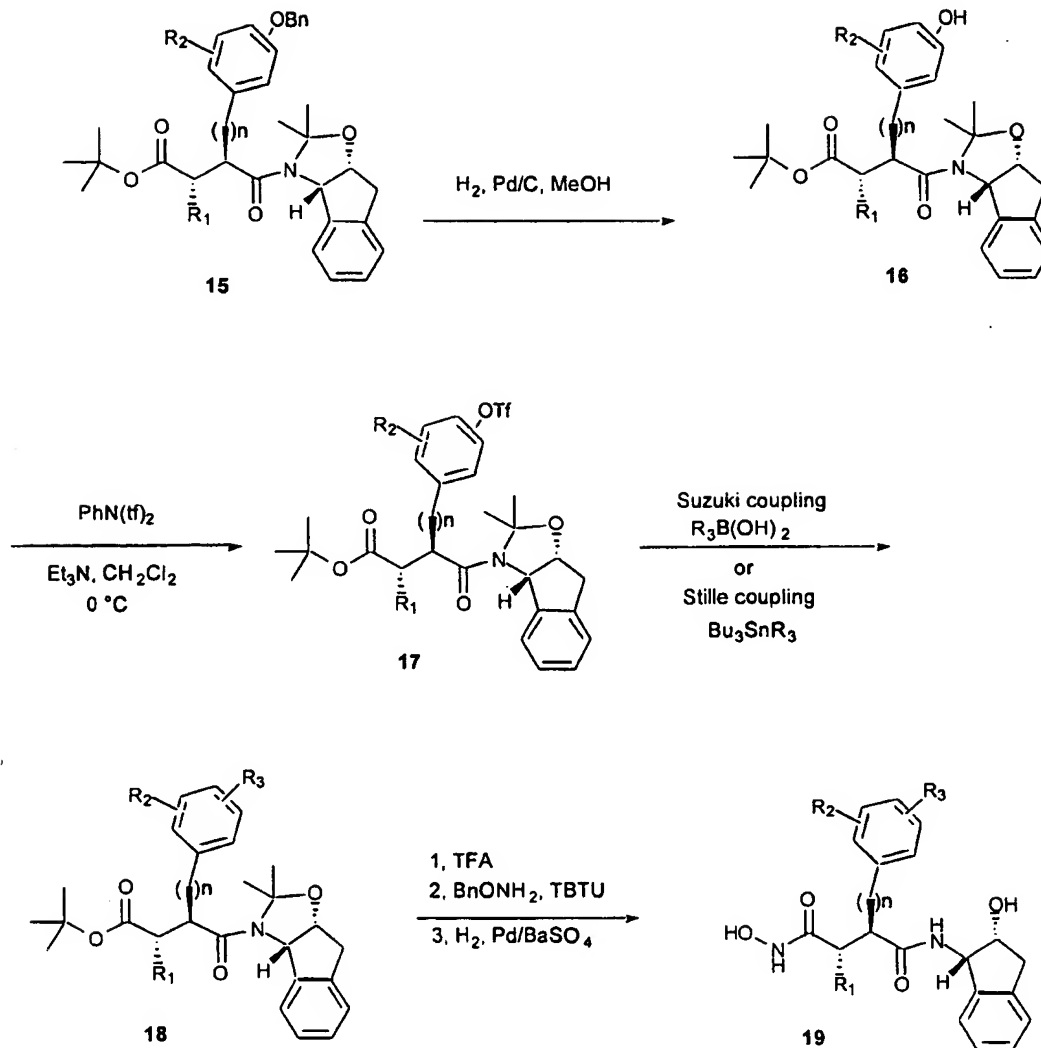
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Compounds of formula **19** are prepared as shown in scheme 4. The intermediate **15** prepared using the method described in scheme 3, was hydrogenated to produce **16**. Compound **16** was then converted to the triflate **17**. The Pd catalyzed Suzuki or stille cross coupling of triflate **17** with either a boronic acid or organostanane afford the coupling product **18**. Using the standard chemistry as described in scheme 3, **18** can be easily converted to the compounds of formula **19**.

20

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## Scheme 4

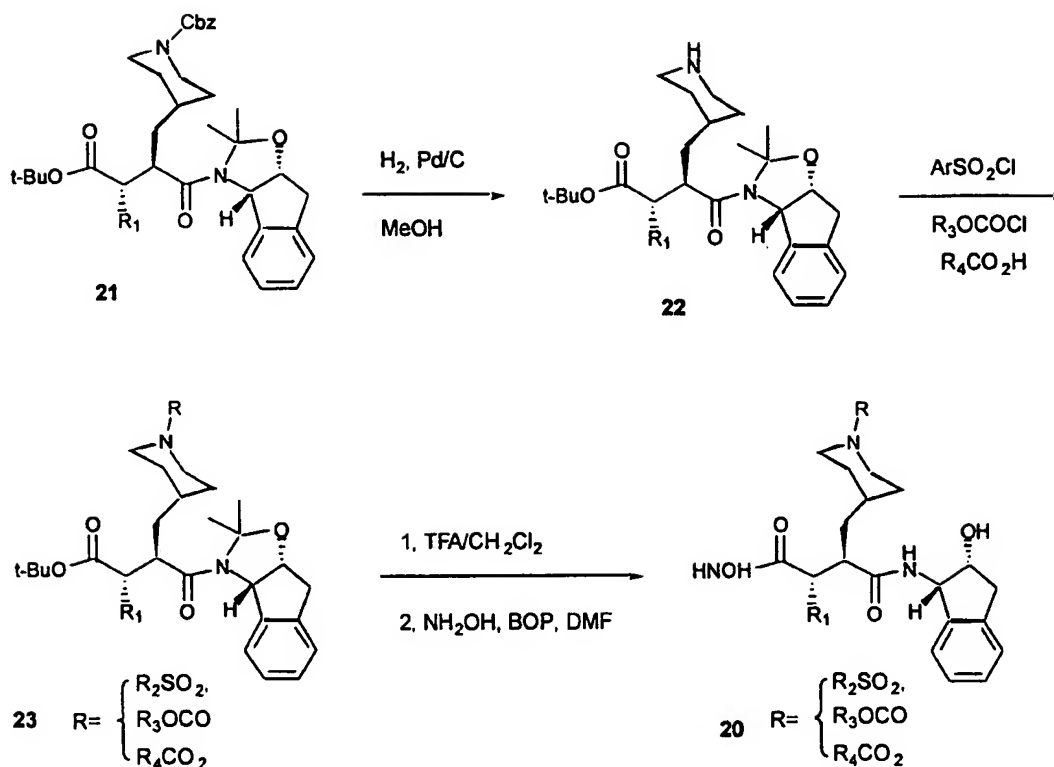


10        Compounds of formula **20** are prepared as shown in  
 scheme 5. Compound **21** prepared as described in scheme  
 2 can be hydrogenated to give the free amine **22**. The  
 free amino group can then be protected as sulfonamides,  
 carbamates, and amides **23**. Following similar chemistry  
 15        to that described in scheme 1, compound **23** can be  
 readily converted to the target of formula **20**.

5

## Scheme 5

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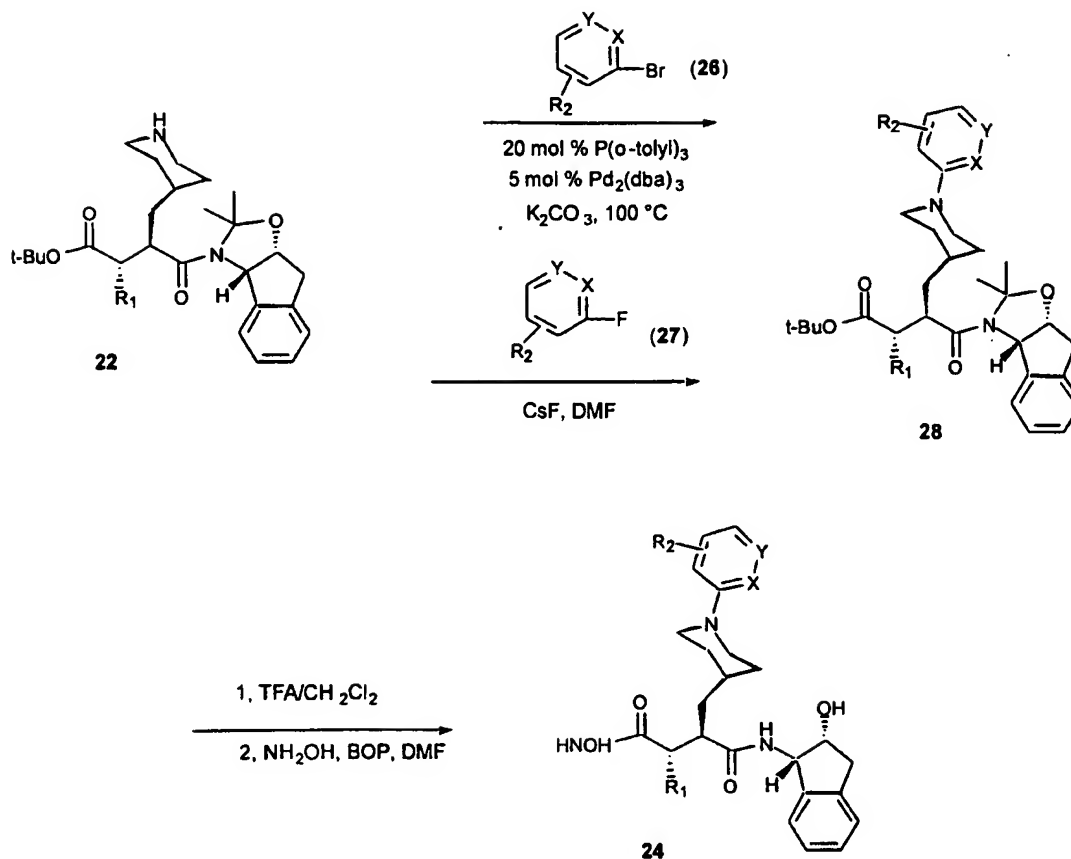


15 Compounds of formula **24** are prepared as shown in scheme 6. Starting from **22** prepared in scheme 5, the free amino group can be further functionalized to afford compound **28** by either palladium catalyzed aryl amination (Wolfe, J. P.; Rennels, R. A.; Buchwald, S. L. *Tetrahedron*, **1996**, 52, 7525-7546, Hartwig, J. F. *Synlett*, **1996**, 329), or displacement with a substituted aryl fluoride. As described in the previous scheme 5, **28** can be easily converted to the final compound **24**.

25

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Scheme 6

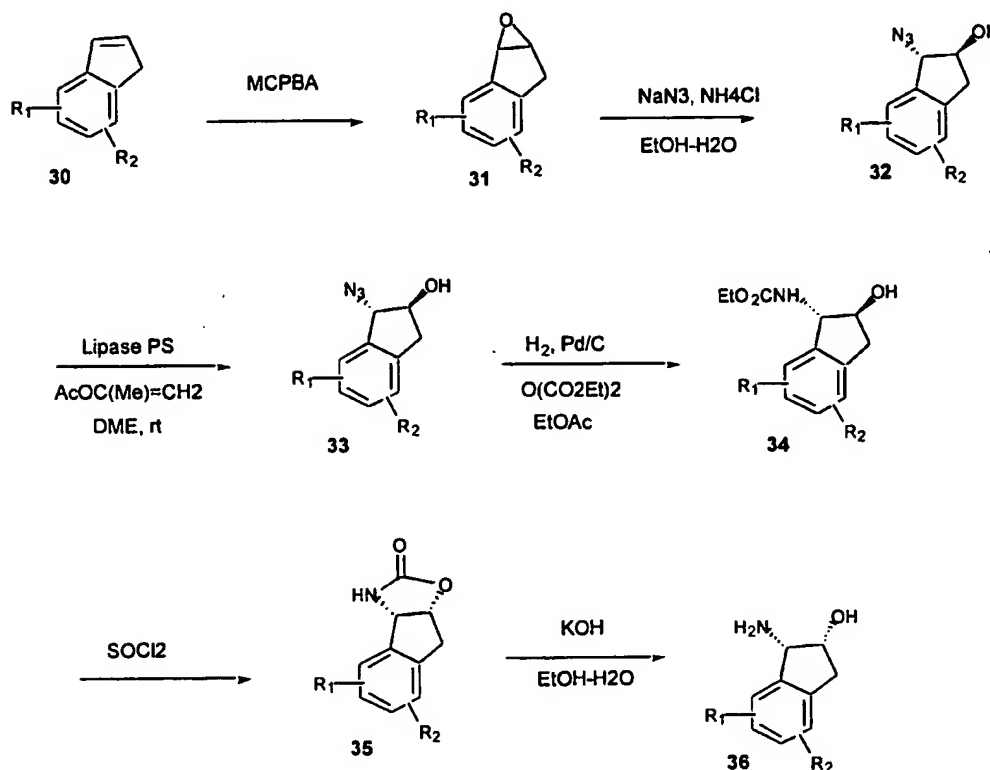


10           Compounds of formula **29** are prepared as shown in schemes 7-9.

          The synthesis of substituted *cis*-1-amino-2-indanol (**36**) was followed by the route developed by Ghosh et al ( Ghosh, A. K.; Kincaid, J. F.; Haske, M. G. *Synthesis*,  
 15   **1997**, 541-544) The substituted indene (**30**) is converted to the epoxide **31** with MCPBA, or to the optically pure epoxide of **31** with Jacobsen's highly enantioselective epoxidation catalysts ( Jacobsen, E. N.; Zhang, W.; Muci, A. R.; Ecker, J. R.; Deng, L. J.  
 20   *Am. Chem. Soc.* **1991**, 113, 7063-7064.). The epoxide **31** is converted to the alcohol **32** by treating it with  $NaN_3$ . The racemic alcohol of **32** is resolved by Lipase

5 PS as described by Ghosh et al (Ghosh, A. K.; Kincaid, J. F.; Haske, M. G. *Synthesis*, **1997**, 541-544). The azide of **33** was hydrogenated in the presence of  $O(CO_2Et)_2$  to give **34**. The compound **34** was then converted to final substituted cis-1-amino-2-indanol **36**  
 10 first by mixing with  $SOCl_2$ , followed by hydrolysis.

Scheme 7



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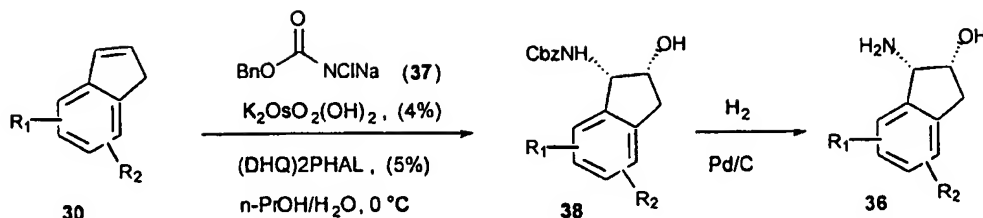
Alternatively, the substituted cis-1-amino-2-indanol **36** is directly prepared from substituted indene (**30**) following a method recently developed by  
 20 Sharpless, K. B. et al as shown in scheme 8 (Li, G.; Angert, H. H.; Sharpless, K. B. *Angew. Chem. Int. Ed. Engl.* **1996**, 35, 2813). The cbz group of **38** was removed by hydrogenation to give the free amine **36**.

25



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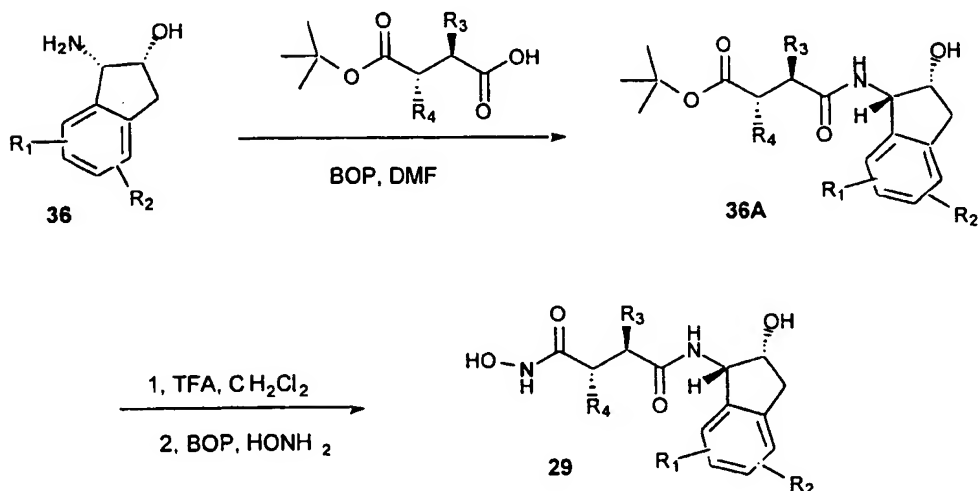
## Scheme 8



10 Following a similar sequence, the compound **36** can then be readily converted to the final compound **29** as shown in scheme 9.

## Scheme 9

15



Compounds of formula **39** can be synthesized as shown in scheme 10. Following the method developed by Sudo and Saigo (Sudo, A.; Saigo, K. *Tetrahedron Asymetry*, 1996, 7, 2939-2956), the racemic *cis*-2-amino-1-indanol can be readily synthesized from substituted indanone **40** as outlined in scheme 9. The indanone can be readily converted into oxime **41** with butyl nitrile under acidic conditions. Reduction of **41** with  $NaBH_4$  in methanol could provide the hydroxy oxime, which was

5 then treated with acetic anhydride and pyridine to give  
diacetate **42**. Borane reduction of **42** then give the  
racemic **43**, which can then be directly used or resolved  
by co-crystalization with tartaric acid or others to  
provide the desired enantiomerically pure amine **43**.  
10 Using similar chemistry to that used for the synthesis  
of target **5** as described in scheme 1, compound **44** can  
be readily converted to the target **39**.

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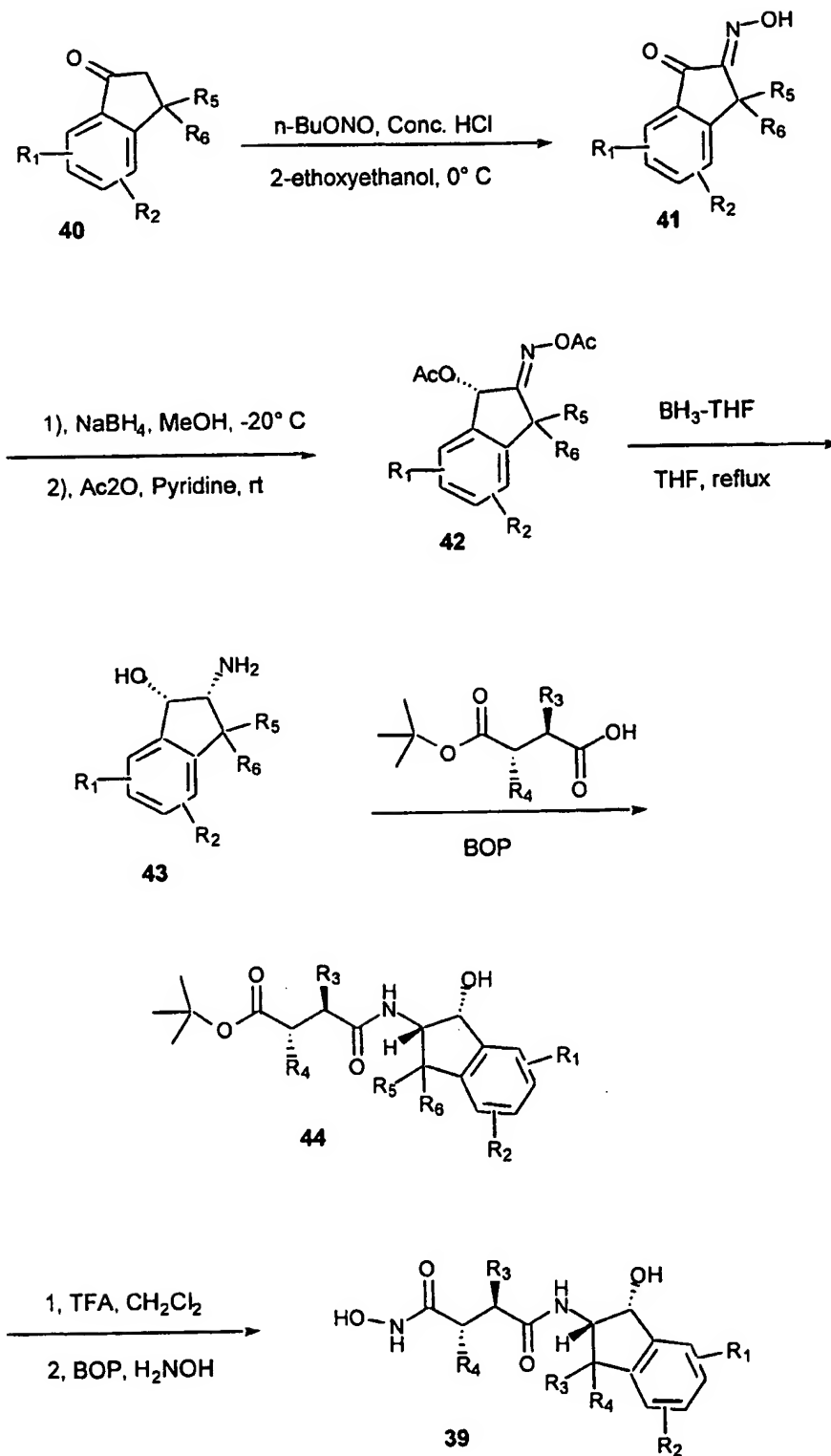
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## Scheme 10

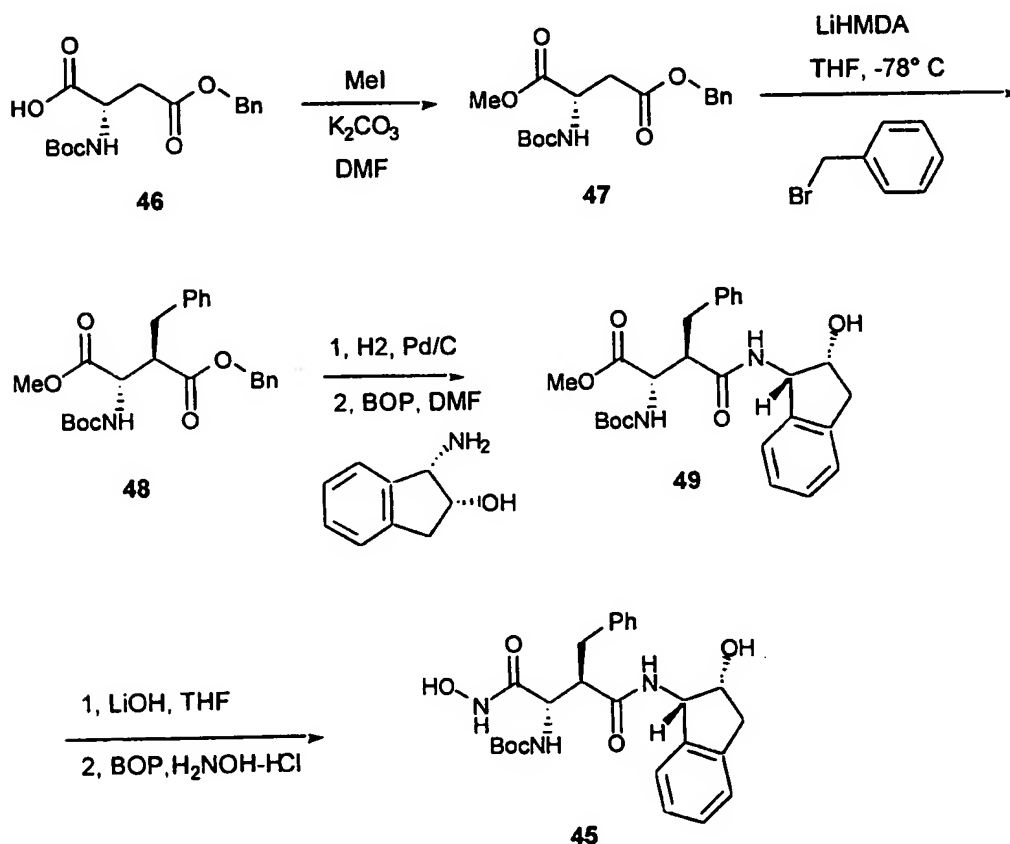


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Compounds of formula **45** are synthesized as shown in scheme 11. The carboxylic group of commercially available aspartic acid was protected as methyl ester **47**. Compound **47** was then treated with LiHMDS in THF at -78 °C to form the enolate, which was reacted with benzyl bromide to afford **48**. The benzyl group of **48** was removed by hydrogenation. The resulting acid was then coupled with cis-2-amino indanol to give **49**. Hydrolysis of compound **49**, followed by coupling with hydroxy amine to furnish the desired target **45**.

Scheme 11

20



### Examples

Abbreviations used in the Examples are defined as follows: "1 x" for once, "2 x" for twice, "3 x" for thrice, "°C" for degrees Celsius, "eq" for equivalent or equivalents, "g" for gram or grams, "mg" for milligram or milligrams, "mL" for milliliter or milliliters, "<sup>1</sup>H" for proton, "h" for hour or hours, "M" for molar, "min" for minute or minutes, "MHz" for megahertz, "MS" for mass spectroscopy, "NMR" for nuclear magnetic resonance spectroscopy, "rt" for room temperature, "tlc" for thin layer chromatography, "v/v" for volume to volume ratio. "R" and "S" are stereochemical designations familiar to those skilled in the art.

Example 1: N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-butanediamide:

(a) N1-(2R-hydroxy-1S-indanyl)-2R-isobutyl-3-(tert-butoxycarbonyl)propanamide:

To a stirred, cooled (0° C) solution of 500 mg (2.17 mmol) 2R-isobutyl 3-(tert-butoxycarbonyl)propinoic acid and 323.9 mg (2.17 mmol) (1S, 2R)-(-) cis -1-amino-2-indanol in 4.0 mL of anhydrous DMF was added 731.4 mg of TBTU, followed by addition of 1.19 mL of diisopropylethyl amine. The reaction was allowed to warm to room temperature. After 1 h, the reaction mixture was diluted with 15 mL 10% citric acid and 50 mL ethyl acetate, the aqueous solution was further extracted with ethyl acetate (2 x 25 mL). The combined organic solution was washed with water, sat. NaHCO<sub>3</sub>, and brine, dried over MgSO<sub>4</sub>. The

solution was filtered and concentrated under reduced pressure to afford 0.685 g (87% yield) as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 362, found 362.

5 (b) N-(2R-hydroxy-1S-indanyl)-2R-isobutyl-3-(hydroxycarbonyl)propanamide:

To a solution of 0.635 g of N-(2R-hydroxy-1S-indanyl)-2R-isobutyl-3-(tert-butoxycarbonyl)  
10 propanamide in 4.5 mL methylene chloride and 0.5 mL water was dropwise added 5.0 mL of TFA. The reaction was stirred at room temperature for 50 min. The solution mixture was concentrated, and dried by co-evaporation with toluene (3 X 15 mL). The resulting  
15 material was directly used in the next step. ESI-MS (M+H)<sup>+</sup>: calcd 306, found 306.

(c) N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-butanediamide:

20

To a cooled (0° C) solution of 501.0 mg of N-(2R-hydroxy-1S-indanyl)-2R-isobutyl-3-(hydroxycarbonyl) propanamide in 6.4 mL DMF was added 786.5 mg of O-benzyl hydroxyamine-HCl, and 684.6 mg of TBTU, followed  
25 by addition of 1.71 mL of ethyldiisopropyl amine. The reaction was stirred at 0° C for 15 min. and warmed to room temperature. After 4 h, the reaction mixture was poured into ethyl acetate / 5% citric acid, the aqueous solution was extracted with ethyl acetate (3 X 25 mL).  
30 The combined organic solution was washed with 5% citric acid, water, sat. NaHCO<sub>3</sub>, brine, and dried over MgSO<sub>4</sub>. The solution was filtered and concentrated to afford 647 mg of desired product as a white solid.

To 323.5 mg of the above in 20 mL methanol was added 500 mg of 5% Pd/BaSO<sub>4</sub>. The mixture was shaken under 50 psi H<sub>2</sub> for 16 hour. The reaction mixture was filtered and concentrated and purified by reverse HPLC to afford 110 mg of the desired hydroxamic acid as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 321, found 321.

Example 2: N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-(3-propionic acid)-butanediamide:

Following a procedure analogous to that used in example 1, 2R-isobutyl 3S-(tert-butoxycarbonyl) 5-benzoxycarbonyl pentanoic acid was coupled with (1S, 2R)-(-) cis -1-amino-2-indanol using TBTU as the coupling reagent. Removal of tert-butyl protecting group was achieved by treating with TFA as described in example 1, followed by coupling with O-benzyl hydroxyamine-HCl mediated by TBTU. The resulting material was hydrogenated to afford the desired product. ESI-MS (M+H)<sup>+</sup>: calcd 393, found 393.

Example 3: N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-methyl-butanediamide:

Following a procedure analogous to that used in example 1, 2R-hexyl 3S-(tert-butoxycarbonyl) butanoic acid was coupled with (1S, 2R)-(-) cis -1-amino-2-indanol using TBTU as the coupling reagent. Removal of tert-butyl protecting group was achieved by treating with TFA as described in example 1, followed by coupling with O-benzyl hydroxyamine-HCl mediated by TBTU or BOP. The resulting material was hydrogenated to afford the desired product as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 335, found 335.

Example 4: N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-propyl-butanediamide:

5

Following a procedure analogous to that used in example 1, 2R-isobutyl 3S-(tert-butoxycarbonyl) hexanoic acid was coupled with (1S, 2R)-(-) cis -1-amino-2-indanol using TBTU as the coupling reagent.

10 Removal of tert-butyl protecting group was achieved by treating with TFA as described in example 1, followed by coupling with O-benzyl hydroxyamine-HCl mediated by TBTU or BOP. The resulting material was hydrogenated to afford the desired product as a white solid. ESI-MS  
15 (M+H)<sup>+</sup>: calcd 363, found 363.

Example 5: N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-hexyl-3(S)-propyl-butanediamide:

20 Following a procedure analogous to that used in example 1, 2R-hexyl 3S-(tert-butoxycarbonyl) hexanoic acid was coupled with (1S, 2R)-(-) cis -1-amino-2-indanol using TBTU as the coupling reagent. Removal of  
tert-butyl protecting group was achieved by treating  
25 with TFA as described in example 1, followed by coupling with O-benzyl hydroxyamine-HCl mediated by TBTU or BOP. The resulting material was hydrogenated to afford the desired product as a white solid. ESI-MS  
(M+H)<sup>+</sup>: calcd 391, found 391.

30

Example 6: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-hydroxy-phenyl)methyl]-butanediamide:

(a) Preparation of N-(2R-hydroxy-1S-indanyl)-3-(4-benzyloxy-phenyl)-propanamide:

35



To a stirred, cooled (0° C) solution of 10g (39.1 mmol) 3-(4-benzyloxy-phenyl)-propinoic acid and 7 g (46.92 mmol) (1S, 2R)-(-) cis -1-amino-2-indanol in 200 mL of anhydrous DMF was added 17.3g BOP as a solid, followed by addition of 20 mL of diethylisopropyl amine. The reaction was allowed to warmed to room temperature. After 5 h, the reaction mixture was diluted with 100 mL 10% citric acid and 100 mL ethyl acetate, the aqueous solution was further extracted with ethyl acetate (2 X 50 mL). The combined organic solution was washed with water, sat. NaHCO<sub>3</sub>, and brine, dried over MgSO<sub>4</sub>. The solution was filtered and concentrated under reduced pressure to afford 15.1 g desired product as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 388, found 388.

(b) N-(1S, 2R-N,O-dimethyl acetamide-indanyl)-3-(4-benzyloxy-phenyl)-propanamide:

To a stirred, cooled (0° C) solution of 15.1 g N-(2R-hydroxy-1S-indanyl)-3-(4-benzyloxy-phenyl)-propanamide and 1.14 g of PPTS in 300 mL of methylene chloride was slowly added 30 ml of 2-methoxy propene. The solution was slowly warmed to room temperature and stirred overnight. The reaction was quenched by addition of 50 mL of sat. NaHCO<sub>3</sub>, and extracted with ethyl acetate (3 X 50 mL). The combined solution was washed with sat NaHCO<sub>3</sub>, water, brine, and dried over MgSO<sub>4</sub>. The solution was filtered and concentrated. The crude material was purified by flash column (Ethyl acetate/ Hexane: 40:60) to give 15.3 g desired product as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 428, found 428.

(c) N-(1S, 2R-N,O-dimethyl acetone-indanyl)-2R-(4-Benzyloxy-phenylmethyl)-3-(tert-butoxycarbonyl)-propanamide:

5 To a stirred and cooled (-78° C) solution of 3.0 g (7.0 mmol) of N-(2R-hydroxy-1S-indanyl)-3-(4-benzyloxy-phenyl)-propanamide in 20 mL THF was dropwise added a freshly prepared, cooled (-78° C) LDA (7.0 mmol) in THF. After 1.0 hour, a solution of 1.14 mL (7.7 mmol).  
10 tert-butyl 2-bromoacetate in 3.0 ml THF was added dropwise. The resulting solution was incubated at -78° C for 4.0 h. The reaction was quenched by addition of 10% citric acid, and extracted with ethyl acetate (3 X 100 mL). The combined organic solution was washed with  
15 water, brine, and dried over MgSO<sub>4</sub>. The solution was filtered and concentrated. The crude material was purified by flash column with (Ethyl acetate/ Hexane: 15-25:85-75) to afford the desired product (2.8 g, 71% yield) as a white solid, and 0.1g of other  
20 diastereomer. ESI-MS (M+H)<sup>+</sup>: calcd 542, found 542.

(d) N-(2R-hydroxy-1S-indanyl)-2R-(4-Benzyloxy-phenylmethyl)-3-(hydroxy-carbonyl) propanamide:

25 To a solution of 1.13 g of N-(2R-hydroxy-1S-indanyl)-2R-(4-Benzyloxy-phenylmethyl)-3-(tert-butoxycarbonyl) propanamide in 7.6 mL methylene chloride and 0.4 mL water was dropwise added 8.0 mL of TFA. The reaction was stirred at room temperature for  
30 50 min. The solution mixture was concentrated to half of its original volume. The residue was then dried by co-evaporation with toluene (3 X 15 mL) and directly used in the next step. ESI-MS (M+H)<sup>+</sup>: calcd 446, found 446.

35

(e) N-(2R-hydroxy-1S-indanyl)-2R-(4-Benzylloxy-phenylmethyl)-3-(N-hydroxyaminocarbonyl)propan-amide:

To a cooled (0° C) solution of 104 mg of N-(2R-  
5 hydroxy-1S-indanyl)-2R-(4-Benzylloxy-phenylmethyl)-3-  
(hydroxy-carbonyl) propanamide in 1.2 mL DMF was added  
112 mg of O-benzyl hydroxylamine-HCl, and 78.8 mg of  
TBTU, followed by addition of 0.24 mL of  
ethyldiisopropyl amine. The reaction was stirred at 0°  
10 C for 15 min. and warmed to room temperature. After  
2h, the reaction mixture was poured into ethyl acetate  
/ 5% citric acid, the aqueous solution was extracted  
with ethyl acetate (3 X 25 mL). The combined organic  
solution was washed with 5% citric acid, water, sat.  
15 NaHCO<sub>3</sub>, brine, and dried over MgSO<sub>4</sub>. The solution was  
filtered and concentrated to afford 105 mg of desired  
product.

To 105 mg of the above in 6 mL methanol was added  
20 60 mg of 5% Pd/BaSO<sub>4</sub>. The mixture was shaken under 50  
psi H<sub>2</sub> for 4 hour. The reaction mixture was filtered  
and concentrated and purified by reverse HPLC to afford  
47 mg of the desired hydroxamic acid as a white solid.  
ESI-MS (M+H)<sup>+</sup>: calcd 371, found 371.

25

Example 7: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-  
2(R)-[4-methoxy-phenyl)methyl]-butanediamide:

Prepared by the method described in example 6 to  
30 give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 385,  
found 385.

Example 8: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-  
2(R)-[4-(hydroxy-phenyl)methyl]-butanediamide:

35

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 355, found 355.

5 Example 9: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-phenyl-propyl]butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 383,  
10 found 383.

Example 10: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[4-(benzyloxy)-phenyl]methyll-butanediamide:

15 Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 461, found 461.

Example 11: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-20 2(R)-[3-(benzyloxy)-phenyl]methyll-butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 461, found 461.

25 Example 12: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl]methyll-butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 371, found 371.

Example 13: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-35 2(R)-[4-(fluoro-phenyl]methyll-butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 373, found 373.

5 Example 14: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3,4-(methylenedioxy-phenyl)methyl]-butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 379,  
10 found 379.

Example 15: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(methoxy-phenyl)methyl]-butanediamide:

15 Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 385, found 385.

Example 16: : N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[4-(phenyl)phenylmethyl]-butanediamide:  
20

(a) N-(1S,2R-N,O-dimethyl acetamide-indanyl)-2R-(4-phenyl)phenylmethyl-3-(tert-butoxycarbonyl) propanamide:  
25

To 2.6 g N-(1S,2R-N,O-dimethyl acetamide-indanyl)-2R-(4-Benzyloxy-phenylmethyl)-3-(tert-butoxycarbonyl) propanamide in 20 mL methanol was added 300 mg of 5% Pd/C. The mixture was shaken under 50 psi  
30 H<sub>2</sub> for 17 hour. The reaction mixture was filtered and concentrated to afford 2.0 g of the desired product.

To a cooled (0° C) solution of 1.2 g of N-(2R-hydroxy-1S-indanyl)-2R-(4-hydroxy-phenylmethyl)-3-(tert-butoxycarbonyl) propanamide and 0.95 g of  
35 PhN(tf)<sub>2</sub> in 9.0 mL of methylene chloride was dropwise

added 0.77 mL Et<sub>3</sub>N. After 45 min at 0° C, the reaction mixture was diluted in ethyl ether (60 mL), washed with sat NaHCO<sub>3</sub>, brine, and dried over MgSO<sub>4</sub>. The crude mater was purified by flash column with 20% ethyl acetate in hexane to afford the desired product as a colorless oil.

To a solution of 192.0 mg of above material and 22 mg of PPh<sub>3</sub> in 1.4 mL toluene and 1.4 mL 0.35M Na<sub>2</sub>CO<sub>3</sub> aq. solution was added catalytical amount (6.0 mg) of Pd(Ac)<sub>2</sub>. The resulting mixture was stirred at 60° C for 10 min, followed by addition of 44 mg of benzene bornic acid as solid. The reaction was heated at 70° C. After four hour, the reaction mixture was then diluted with ethyl acetate, washed with water, brine, and dried over MgSO<sub>4</sub>. The crude material was purified by 15% ethyl acetate in hexane to afford 127.1 mg of desired product as a colorless oil. ESI-MS (M+H)<sup>+</sup>: calcd 431, found 431.

(b) N-(2R-hydroxy-1S-indanyl)-2R-(4-phenyl)phenyl-methyl-3-(N-hydroxyaminocarbonyl)propanamide;

Following the method used in the synthesis of example 1, the above N-(1S ,2R-N,O-dimethyl acetone-indanyl)-2R-(4-phenyl)phenylmethyl-3-(tert-butoxycarbonyl) propanamide was treated with TFA, followed by coupling with hydroxylamine to yield the desired N-(2R-hydroxy-1S-indanyl)-2R-(4-phenyl)-phenylmethyl-3-(N-hydroxyaminocarbonyl)-propanamide as a white solid. ESI-MS (M+H)<sup>+</sup>: calcd 431.2, found 431.2

Example 17: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tert-butylaminosulfonyl)-phenyl]phenyl]methyl]butanediamide;

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 566, found 566.

5

Example 18: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-methoxy-phenyl)phenyl]methyl-1butanediamide:

10 Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 461, found 461.

Example 19: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3-trifluoromethyl-phenyl)-phenyl]methyl]butanediamide:

15

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 499, found 499.

20

Example 20: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[3-(3-hydroxy-4-methoxyphenyl)-methyl]butanediamide:

25 Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 401, found 401.

Example 21: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[3-(3-thiophene)-isoxazolinel-methyl]butanediamide:

30

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 429, found 429.

35

Example 22: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-chloro-phenyl)-phenyl]-methyl]butanediamide:

5           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 465.5, found 465.5.

Example 23: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-benzofuran)-phenyl]-methyl]butanediamide:

15           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 471, found 471.

Example 24: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-methyl-phenyl)-phenyl]-methyl]butanediamide:

20           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 445, found 445.

Example 25: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[3,4-(methylenedioxy-phenyl)-phenyl]methyl]butanediamide:

30           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 475, found 475.

Example 26: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-tetrazole-phenyl)-phenyl]-methyl]butanediamide:

35



Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 499, found 499.

5 Example 27: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[3-phenyl)phenyl)methyl]-butanediamide:

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 431,  
10 found 431.

Example 28: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[3-methyl-phenyl)phenyl)methyl]-butanediamide:

15 Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 445, found 445.

Example 29: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-20 2(R)-[4-(amino-phenyl)methyl]-butanediamide:

Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 370, found 370.

25

Example 30: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(benzyloxy-carbonyl)-aminolphenyl)methyl]-butanediamide:

30 Prepared by the method described in example 6 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 504, found 504.

Example 31: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-35 2(R)-[[4-(2-hydroxymethylene)phenyl)-phenyl)methyl]-butanediamide:

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 461, found 461.

5

Example 32: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3,4,5-trimethoxy-phenyl)phenyl]methyl]-butanediamide:

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 521, found 521.

10

Example 33: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2,4-di-methoxy-phenyl)-phenyl]methyl]-butanediamide:

15

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 491, found 491.

20

Example 34: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3,5-di-chloro-phenyl)-phenyl]methyl]butanediamide:

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 499, found 499.

25

Example 35: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2-trifluoromethyl-phenyl)-phenyl]methyl]-butanediamide:

30

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 499, found 499.

35

Example 36: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3-isopropyl-phenyl)-phenyl]methyl]butane-diamide:

- 5           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 473, found 473.

Example 37: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(2,4-dichloro-phenyl)-phenyl]methyl]butane-diamide:

- 15           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 499, found 499.

Example 38: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3-chloro-4-fluoro-phenyl)-phenyl]methyl]-butanediamide:

- 20           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 483, found 483.

Example 39: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(p-toluenesulfonylamino)-phenyl]methyl]-butanediamide:

- 25           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 524, found 524.

Example 40: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butyloxy-carbonyl-amino)-butanediamide:

- 35

To a solution of 20g of Boc-Asp(OBn)-OH and 8.9 g of  $K_2CO_3$  in 200 mL DMF was added 4.04 mL of  $CH_3I$ . The reaction mixture was stirred at room temperature for 12 h. The mixture was diluted in water, extracted with  
5 diethyl ether. The combined organic layer was washed with sat.  $NaHCO_3$ , water and brine. The crude material was recrystallized from diethyl ether and hexane to afford 19.2g of the desired product Boc-Asp(OBn)- $OCH_3$ .

To a cooled (-78 °C) solution of 2.5 g of compound  
10 Boc-Asp(OBn)- $OCH_3$  in 49 mL toluene was added dropwise 15.2 mL of (1.0 M in THF) LiHMDS over 15 min. The resulting solution was stirred at -78 °C for 1.0 h, followed by addition of 1.4 mL benzyl bromide. The solution was stirred at -50 °C overnight. The reaction  
15 was quenched with 10% citric acid, and extracted with diethyl ether. The organic layer was washed with sat. brine, dried over  $Na_2SO_4$ . The crude material was purified by 15% ethyl acetate to afford 2.1 g (64% yield) of desired product.

20 1.0 g (2.34 mmol) above product and 500 mg of 10% Pd/C was hydrogenated at 32 Psi for two hour. The reaction mixture was filtered, and concentrated to afford a residue.

678 mg (2.01 mmol) above acid was coupled with 314  
25 mg cis-2-amino indanol using 933 mg of BOP as the coupling reagent in DMF to afford 867 mg of coupling product N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-4-(tert-butoxycarbonyl)butan-amide.

30 To a cooled solution of 268 mg of N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-4-(tert-butoxycarbonyl)butan-amide in 4.3 mL THF was added 0.43 mL (2.5 M in  $H_2O$ ) LiOH solution. The reaction mixture  
35 was stirred at 0 °C for 30 min. The reaction was quenched with 10% citric acid, extracted with EtOAc,

the organic layer was washed with sat. brine, and dried over Na<sub>2</sub>SO<sub>4</sub>. The solvent was removed to afford 252.1 mg of the product as white solid.

5 The above acid (252 mg, 0.555 mmol) was treated with 257 mg of BOP and 116 mg of hydroxylamine in DMF. The crude material was purified by RP-HPLC (column: 41.5 X 250 mm C18 dynamax, gradient: 15 to 65% acetonitrile with 0.1% TFA over 25 min. The sample was detected at 220 nM.) to give the desired material N1-  
10 [2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide, ESI-MS (M+H)<sup>+</sup>: calcd 470, found 470.

Example 41: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4-methylenedioxyphenyl)-phenyl]methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide:  
15

Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 588,  
20 found 588.

Example 42: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-methoxyphenyl)-phenyl]methyl]butanediamide:

25 Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 461, found 461.

Example 43: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-fluorophenyl)-phenyl]-methyl]butanediamide:  
30

Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 449, found 449.

35

Example 44: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(fluoro-phenyl)methyl]-3(S)-(tert-butyloxy-carbonyl-amino)-butanediamide;

- 5           Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 488, found 488.

Example 45: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(tert-butyloxy-carbonyl-amino)-butanediamide;

10

- Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 486, found 486.
- 15

Example 46: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3-nitrophenyl)phenyl]-methyl]butanediamide;

- 20           Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 476, found 476.

Example 47: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[[4-(3-(methylsulfonyl-amino)-phenyl)phenyl]-methyl]butanediamide;

25

- Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 524, found 524.
- 30

Example 48: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propionamido)-butanediamide;

35

Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 470, found 470.

5 Example 49: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(ethyloxy-carbonyl-amino)-butanediamide:

Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 458, found 458.

Example 50: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-butyloxy-carbonyl-amino)-butanediamide:

Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 486, found 486.

20 Example 51: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(propionamido)-butanediamide:

25 Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 458, found 458.

Example 52: N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide:

Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 452, found 452.

Example 53: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propyl-amino)-butanediamide;

- 5           Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 455, found 455.

Example 54: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(methylsulfonyl-amino)-butanediamide;

10

- Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 464, found 464.
- 15

Example 55: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-amino-butane-diamide;

20

- Prepared by the method described in example 40 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 386, found 386.

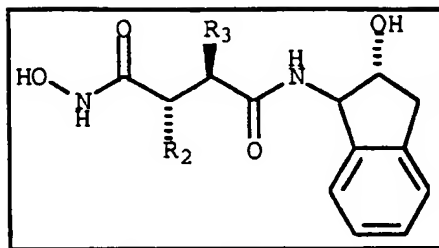
Example 56: N1-[2(R)-hydroxy-1(S)-indanyll-N4-hydroxy-2(R)-[4-(methylsulfonylamino)-phenyl)methyl]butane-diamide;

25

- Prepared by the method described in example 16 to give the desired material. ESI-MS (M+H)<sup>+</sup>: calcd 448, found 448.
- 30



Table 1



5

Ex#	R <sub>2</sub>	R <sub>3</sub>	M+H
1	H	iso-butyl	321
2	CH <sub>2</sub> CH <sub>2</sub> CO <sub>2</sub> H	iso-butyl	393
3	methyl	iso-butyl	335
4	n-propyl	iso-butyl	363
5	n-propyl	n-C <sub>6</sub> H <sub>13</sub>	391
6	H	4-hydroxyphenylmethyl	371
7	H	4-methoxyphenylmethyl	385
8	H	4-hydroxyphenylmethyl	355
9	H	3-phenylpropyl	383
10	H	4-benzyloxyphenylmethyl	461
11	H	3-benzyloxyphenylmethyl	461
12	H	3-hydroxyphenylmethyl	371
13	H	4-fluorophenylmethyl	373
14	H	3,4-methylenedioxy phenylmethyl	379
15	H	3-methoxyphenylmethyl	385
16	H	4-phenyl-phenylmethyl	431
17	H	4-(2-(tert- butylaminosulfonyl)- phenyl)phenylmethyl	566
18	H	4-(2-methoxyphenyl)- phenylmethyl	461
19	H	4-(3-trifluoromethyl- phenyl)-phenylmethyl	499
20	H	(3-hydroxy-4- methoxy)phenylmethyl	401
21	H	3-(3-thiophene)- isoxazoline-methyl	429

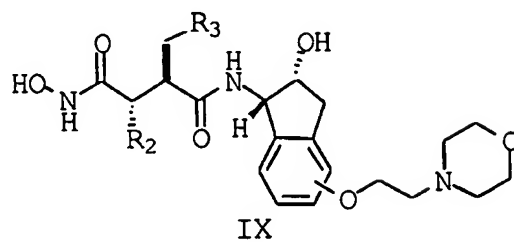
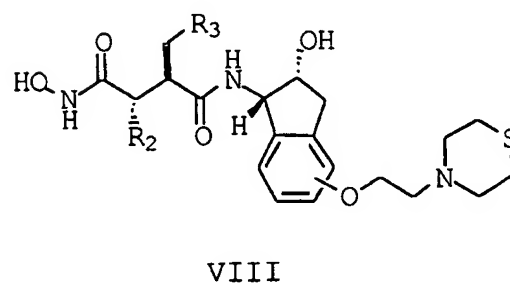
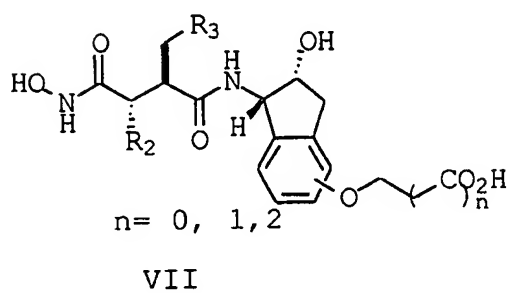
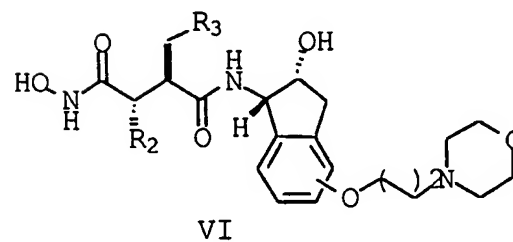
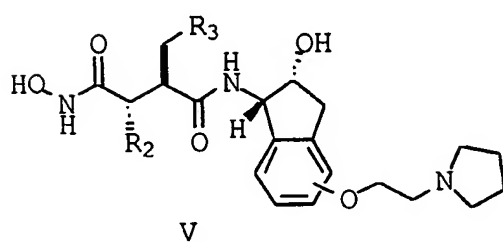
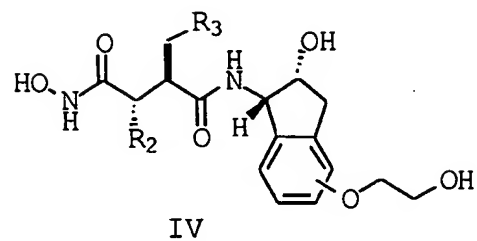
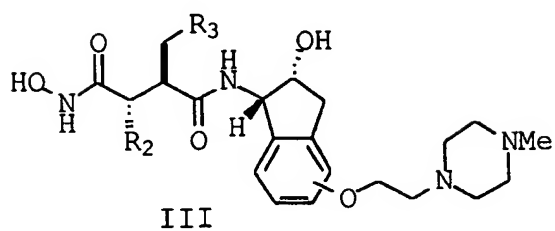
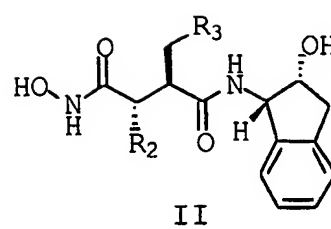
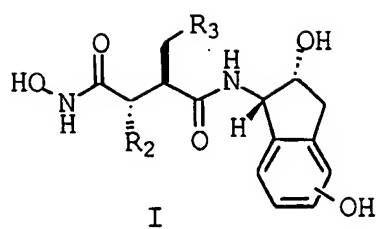
22	H	4-(2-chlorophenyl)- phenylmethyl	465
23	H	4-(2-benzofuran)- phenylmethyl	471
24	H	4-(2-methylphenyl)-phenyl- methyl	445
25	H	(3,4-methylene- dioxyphenyl)phenyl-methyl	475
26	H	4-(2-tetrazolephenyl)- phenyl-methyl	499
27	H	3-phenylphenylmethyl	431
28	H	(3-methyl-phenyl)- phenylmethyl	445
29	H	4-amino-phenylmethyl	370
30		4-benzyloxy- carbonyl-amino-phenylmethyl	504
31	H	4-(2-hydroxymethylene- phenyl)phenylmethyl	461
32	H	4-(3,4,5-trimethoxy- phenyl)phenylmethyl	521
33	H	4-(2,4-dimethoxy- phenyl)phenylmethyl	491
34	H	4-(3,5-dichloro-phenyl)- phenylmethyl	499
35	H	4-(2-trifluoromethyl- phenyl)phenylmethyl	499
36	H	4-(3-isopropyl- phenyl)phenyl-methyl	473
37	H	4-(2,4-dichloro- phenyl)phenyl-methyl	499
38	H	4-(3-chloro,4-fluoro- phenyl)phenylmethyl	483
39	H	4-(p-toluenesulfonyl- amino)-phenylmethyl	524
40	BocNH	phenylmethyl	470
41	BocNH	4-(3,4-methylenedioxy- phenyl)phenylmethyl	588

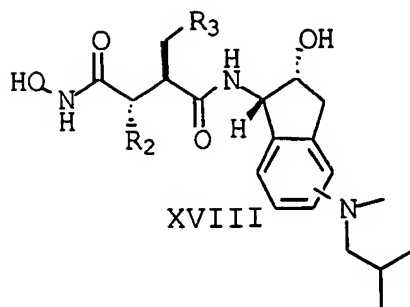
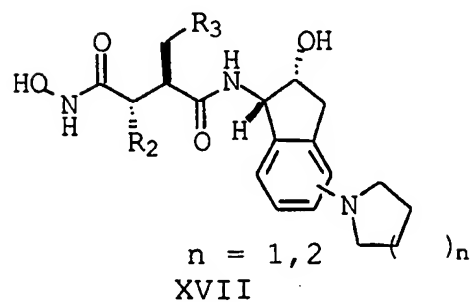
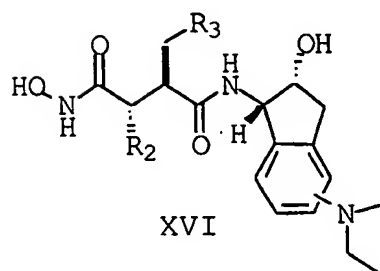
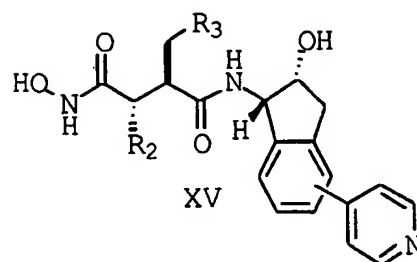
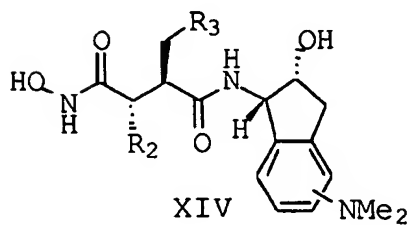
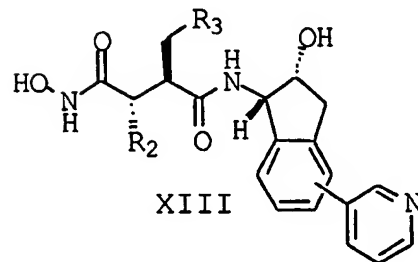
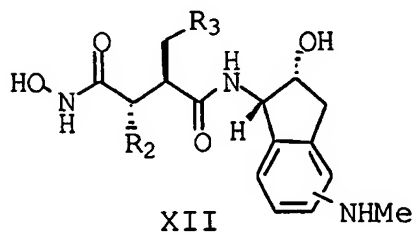
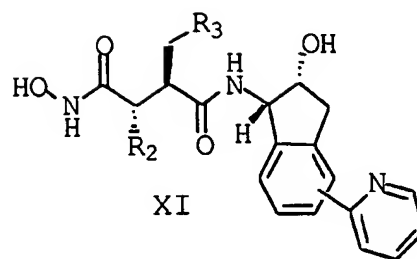
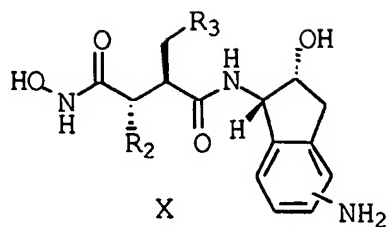
42	H	4-(3-methoxy-phenyl)phenylmethyl	461
43	H	4-(3-fluoro-phenyl)phenylmethyl	449
44	BocNH	3-fluorophenylmethyl	488
45	BocNH	3-hydroxyphenylmethyl	486
46	H	4-(3-nitro-phenyl)phenylmethyl	476
47	H	4-(3-methylsulfonylamino-phenyl)phenylmethyl	524
48	2,2-dimethylpropionamido	3-hydroxyphenylmethyl	470
49	ethoxycarbonylamino	3-hydroxyphenylmethyl	458
50	iso-butoxy-carbonyl-amino	3-hydroxyphenylmethyl	486
51	propionamido	3-hydroxyphenylmethyl	458
52	1-methylcyclopropane carboxamido-1-yl	3-hydroxyphenylmethyl	452
53	2,2-dimethylpropylamino	3-hydroxyphenylmethyl	455
54	methylsulfonylamino	3-hydroxyphenylmethyl	464
55	amino	3-hydroxyphenylmethyl	386
56	H	4-(methylsulfonyl-amino)phenylmethyl	448

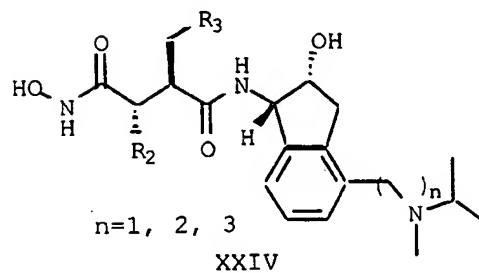
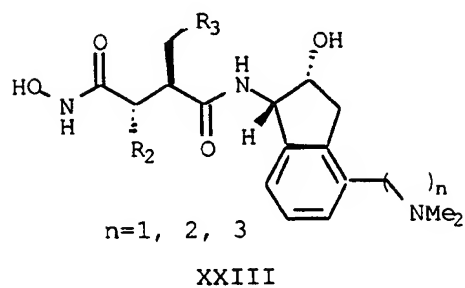
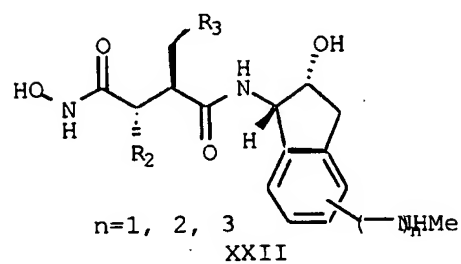
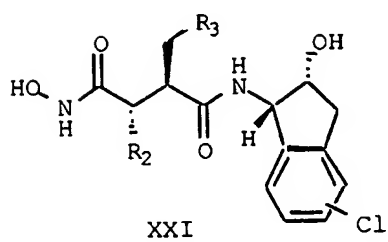
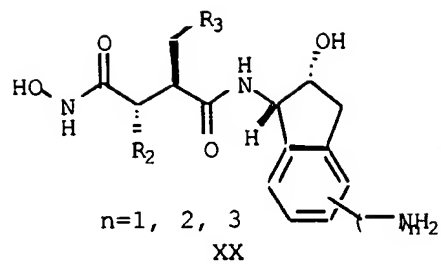
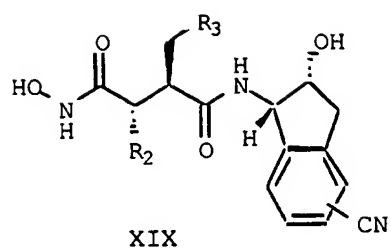
The following tables contain representative examples of the present invention. Each entry in each table is intended to be paired with the formula at the start of the table.

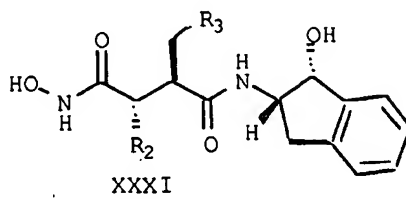
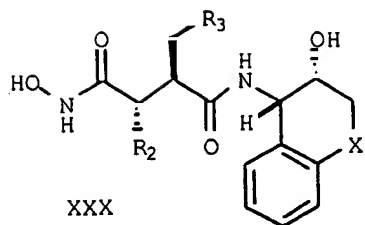
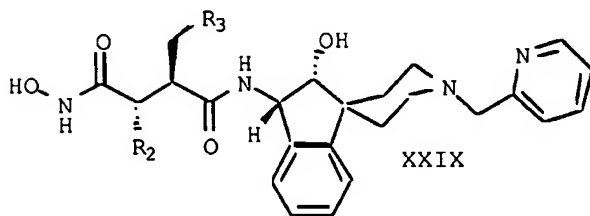
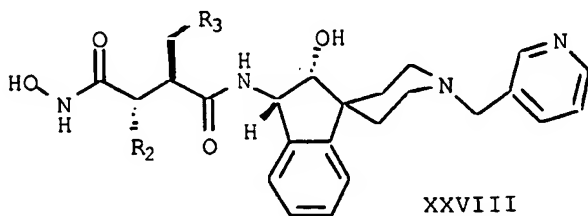
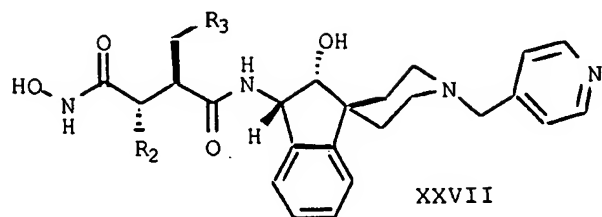
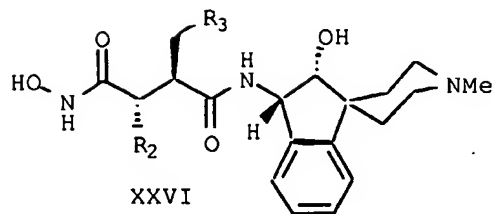
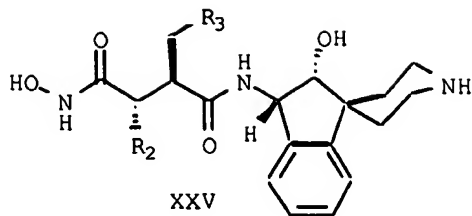
5

Table 2

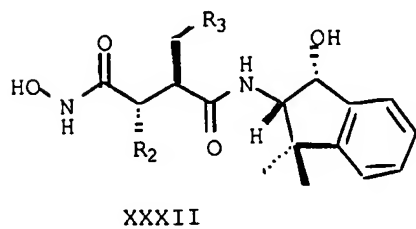








X = CH<sub>2</sub>, O, S, S(O)<sub>2</sub>, S(O)



Ex #	R2	R3	Ms
200	H	H	
201	H	methyl	
202	H	ethyl	
203	H	n-propyl	
204	H	n-butyl	
205	H	n-pentyl	
206	H	n-hexanyl	
207	H	n-heptanyl	
208	H	isopropyl	
209	H	tert-butyl	
210	H	cyclopropyl	
211	H	cyclobutanyl	
212	H	cyclopentanyl	
213	H	cyclohexanyl	
214	H	cycloheptanyl	
215	H	phenyl	
216	H	phenylmethyl	
217	H	3-hydroxyphenyl	
218	H	3-hydroxy-4-methoxyphenyl	
219	H	3-fluorophenyl	
220	H	3-chlorophenyl	
221	H	3-nitrophenyl	
222	H	3-aminophenyl	
223	H	3-methylsulfonamidophenyl	
224	H	3-trifluoro-methylsulfonamidophenyl	
225	H	3-Ac-NHphenyl	
226	H	3-Boc-NHphenyl	
227	H	3-Cbz-NHphenyl	
228	H	3-aminomethylenephanyl	
229	H	3-aminoethylenephanyl	
230	H	3-cyanophenyl	
231	H	3-cyanomethylphenyl	
232	H	3-hydroxymethylenephanyl	
233	H	3-carboxylphenyl	
234	H	3-mercaptophenyl	
235	H	3-methoxyphenyl	
236	H	3,4-methylenedioxyphenyl	
237	H	3-tetrazolephenyl	
238	H	3-aminosulfonylphenyl	
239	H	3-methylamino-sulfonylphenyl	
240	H	3-ethylamino-sulfonylphenyl	
241	H	3-tert-butylamino-sulfonylphenyl	
242	H	3-methylsulfonylphenyl	
243	H	4-methoxyphenyl	
244	H	4-phenylphenyl	
245	H	(2-hydroxy-methylenephanyl)-phenyl	
246	H	(2-tert-butylamino-sulfonylphenyl)-phenyl	
247	H	(2-methylamino-sulfonylphenyl)-phenyl	
248	H	(2-ethylamino-sulfonylphenyl)-phenyl	
249	H	(2-amino-sulfonylphenyl)-phenyl	
250	H	(2-chlorophenyl)-phenyl	
251	H	(2-fluorophenyl)-phenyl	
252	H	(2,4-dichlorophenyl)-phenyl	



253	H	(2,6-dichlorophenyl)-phenyl	
254	H	(3,5-dichlorophenyl)-phenyl	
256	H	(2,3-dichlorophenyl)-phenyl	
257	H	(2-methylphenyl)-phenyl	
258	H	(2-tetrazole-phenyl)-phenyl	
259	H	(2-methoxy-phenyl)-phenyl	
260	H	(2-tmethyl-phenyl)-phenyl	
261	H	(2-formyl-phenyl)-phenyl	
262	H	(2-amino-phenyl)-phenyl	
263	H	(2-methylamino-phenyl)-phenyl	
264	H	(2-ethylamino-phenyl)-phenyl	
265	H	(2-propylamino-phenyl)-phenyl	
266	H	(2-methylsulfonylamino-phenyl)-phenyl	
267	H	(2-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
268	H	(3-methylphenyl)-phenyl	
269	H	(3-isopropylphenyl)-phenyl	
270	H	(3-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
271	H	(3-methylsulfonylamino-phenyl)-phenyl	
272	H	(3-amino-phenyl)-phenyl	
273	H	(3-nitro-phenyl)-phenyl	
274	H	2-pyridyl	
275	H	3-pyridyl	
276	H	4-pyridyl	
277	H	3-amino-4-pyridyl	
278	H	3-hydroxy-4-pyridyl	
279	H	3-imidazole	
280	H	2-nitro-3-imidazole	
281	H	5-thiazole	
282	H	5-oxazole	
283	H	4-pyazole	
284	H	phenylethyl	
285	H	2-aminophenylethyl	
286	H	2-methylsulfonylamino-phenylethyl	
287	H	2-trifluoromethylsulfonylamino-phenylethyl	
288	H	2-hydroxymethylene-phenylethyl	
289	H	2-aminomethylene-phenylethyl	
290	H	2-tetrazolephenylethyl	
291	H	2-tert-butylamino-sulfonylphenylethyl	
292	H	2-aminosulfonyl-phenylethyl	
293	H	2-methoxyphenylethyl	
294	H	3-aminophenylethyl	
295	H	3-methylsulfonylamino-phenylethyl	
296	H	3-trifluoromethylsulfonylamino-phenylethyl	
297	H	3-hydroxymethylene-phenylethyl	
298	H	3-aminomethylene-phenylethyl	

299	H	3-tetrazolephenylethyl	
300	H	3-tert-butylamino-sulfonylphenylethyl	
301	H	3-aminosulfonyl-phenylethyl	
302	H	3-methoxyphenylethyl	
303	methyl	H	
304	methyl	methyl	
305	methyl	ethyl	
306	methyl	n-propyl	
307	methyl	n-butyl	
308	methyl	n-pentyl	
309	methyl	n-hexanyl	
310	methyl	n-heptyl	
311	methyl	isopropyl	
312	methyl	tert-butyl	
313	methyl	cyclopropyl	
314	methyl	cyclobutanyl	
315	methyl	cyclopentanyl	
316	methyl	cyclohexanyl	
317	methyl	cycloheptyl	
318	methyl	phenyl	
319	methyl	phenylmethyl	
320	methyl	3-hydroxyphenyl	
321	methyl	3-hydroxy-4-methoxyphenyl	
322	methyl	3-fluorophenyl	
323	methyl	3-chlorophenyl	
324	methyl	3-nitrophenyl	
325	methyl	3-aminophenyl	
326	methyl	3-methylsulfonylamidephenyl	
327	methyl	3-trifluoro-methylsulfonylamidephenyl	
327	methyl	3-Ac-NHphenyl	
329	methyl	3-Boc-NHphenyl	
330	methyl	3-Cbz-NHphenyl	
331	Methyl	3-aminomethylenepheryl	
332	methyl	3-aminoethylenepheryl	
333	methyl	3-cyanophenyl	
334	methyl	3-cyanomethylphenyl	
335	methyl	3-hydroxymethylenepheryl	
336	methyl	3-carboxylphenyl	
337	methyl	3-mercaptophenyl	
338	methyl	3-methoxyphenyl	
339	methyl	3,4-methylenedioxyphenyl	
340	methyl	3-tetrazolephenyl	
341	methyl	3-aminosulfonylphenyl	
342	methyl	3-methylamino-sulfonylphenyl	
343	methyl	3-ethylamino-sulfonylphenyl	
344	methyl	3-tert-butylamino-sulfonylphenyl	
345	methyl	3-methylsulfonylphenyl	
346	methyl	4-methoxyphenyl	
347	methyl	4-phenylphenyl	
348	methyl	2-hydroxymethylene-phenyl)-phenyl	
349	methyl	(2-tert-butylamino-sulfonylphenyl)-phenyl	
350	methyl	(2-methylamino-sulfonylphenyl)-phenyl	
351	methyl	(2-ethylamino-sulfonylphenyl)-phenyl	
352	methyl	(2-aminosulfonyl-phenyl)-phenyl	
353	methyl	(2-chlorophenyl)-phenyl	

354	methyl	(2-fluorophenyl)-phenyl	
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356	methyl	(2,6-dichlorophenyl)-phenyl	
357	methyl	(3,5-dichlorophenyl)-phenyl	
358	methyl	(2,3-dichlorophenyl)-phenyl	
359	methyl	(2-methylphenyl)-phenyl	
360	methyl	(2-tetrazole-phenyl)-phenyl	
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362	methyl	(2-tmethyl-phenyl)-phenyl	
363	methyl	(2-formyl-phenyl)-phenyl	
364	methyl	(2-amino-phenyl)-phenyl	
365	methyl	(2-methylamino-phenyl)-phenyl	
366	methyl	(2-ethylamino-phenyl)-phenyl	
367	methyl	(2-propylamino-phenyl)-phenyl	
368	methyl	(2-methylsulfonylamino-phenyl)-phenyl	
369	methyl	(2-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
370	methyl	(3-methylphenyl)-phenyl	
371	methyl	(3-isopropylphenyl)-phenyl	
372	methyl	(3-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
373	methyl	(3-methylsulfonylamino-phenyl)-phenyl	
374	methyl	(3-amino-phenyl)-phenyl	
375	methyl	(3-nitro-phenyl)-phenyl	
376	methyl	2-pyridyl	
377	methyl	3-pyridyl	
378	methyl	4-pyridyl	
379	methyl	3-amino-4-pyridyl	
380	methyl	3-hydroxy-4-pyridyl	
381	methyl	3-imidazole	
382	methyl	2-nitro-3-imidazole	
383	methyl	5-thiazole	
384	methyl	5-oxazole	
385	methyl	4-pyazole	
386	methyl	phenylethyl	
387	methyl	2-aminophenylethyl	
388	methyl	2-methylsulfonylamino-phenylethyl	
389	methyl	2-trifluoromethyl-sulfonylamino-phenylethyl	
390	methyl	2-hydroxymethylene-phenylethyl	
391	methyl	2-aminomethylene-phenylethyl	
392	methyl	2-tetrazolephenylethyl	
393	methyl	2-tert-butylamino-sulfonylphenylethyl	
394	methyl	2-aminosulfonyl-phenylethyl	
395	methyl	2-methoxyphenylethyl	
396	methyl	3-aminophenylethyl	
397	methyl	3-methylsulfonylamino-phenylethyl	
398	methyl	3-trifluoromethylsulfonylamino-phenylethyl	
399	methyl	3-hydroxymethylene-phenylethyl	

400	methyl	3-aminomethylene-phenylethyl	
401	methyl	3-tetrazolephenylethyl	
402	methyl	3-tert-butylamino-sulfonylphenylethyl	
403	methyl	3-aminosulfonyl-phenylethyl	
404	methyl	3-methoxyphenylethyl	
405	OH	H	
406	OH	methyl	
407	OH	ethyl	
408	OH	n-propyl	
409	OH	n-butyl	
410	OH	n-pentyl	
411	OH	n-hexanyl	
412	OH	n-heptanyl	
413	OH	isopropyl	
414	OH	tert-butyl	
415	OH	cyclopropyl	
416	OH	cyclobutanyl	
417	OH	cyclopentanyl	
418	OH	cyclohexanyl	
419	OH	cycloheptanyl	
420	OH	phenyl	
421	OH	phenylmethyl	
422	OH	3-hydroxyphenyl	
423	OH	3-hydroxy-4-methoxyphenyl	
424	OH	3-fluorophenyl	
425	OH	3-chlorophenyl	
426	OH	3-nitrophenyl	
427	OH	3-aminophenyl	
428	OH	3-methylsulfonylamidephenyl	
429	OH	3-trifluoro-methylsulfonylamidephenyl	
430	OH	3-Ac-NHphenyl	
431	OH	3-Boc-NHphenyl	
432	OH	3-Cbz-NHphenyl	
433	OH	3-aminomethylenephphenyl	
434	OH	3-aminoethylenephphenyl	
435	OH	3-cyanophenyl	
436	OH	3-cyanomethylphenyl	
437	OH	3-hydroxymethylenephphenyl	
438	OH	3-carboxylphenyl	
439	OH	3-mercaptophenyl	
440	OH	3-methoxyphenyl	
441	OH	3,4-methylenedioxophenyl	
442	OH	3-tetrazolephenyl	
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444	OH	3-methylamino-sulfonylphenyl	
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446	OH	3-tert-butylamino-sulfonylphenyl	
447	OH	3-methylsulfonylphenyl	
448	OH	4-methoxyphenyl	
449	OH	4-phenylphenyl	
450	OH	(2-hydroxymethylene-phenyl)-phenyl	
451	OH	(2-tert-butylamino-sulfonylphenyl)-phenyl	
452	OH	(2-methylamino-sulfonylphenyl)-phenyl	
453	OH	(2-ethylamino-sulfonylphenyl)-phenyl	

454	OH	(2-aminosulfonyl-phenyl)-phenyl	
455	OH	(2-chlorophenyl)-phenyl	
456	OH	(2-fluorophenyl)-phenyl	
457	OH	(2,4-dichlorophenyl)-phenyl	
458	OH	(2,6-dichlorophenyl)-phenyl	
459	OH	(3,5-dichlorophenyl)-phenyl	
460	OH	(2,3-dichlorophenyl)-phenyl	
461	OH	(2-methylphenyl)-phenyl	
462	OH	(2-tetrazole-phenyl)-phenyl	
463	OH	(2-methoxy-phenyl)-phenyl	
464	OH	(2-tmethyl-phenyl)-phenyl	
465	OH	(2-formyl-phenyl)-phenyl	
466	OH	(2-amino-phenyl)-phenyl	
467	OH	(2-methylamino-phenyl)-phenyl	
468	OH	(2-ethylamino-phenyl)-phenyl	
469	OH	(2-propylamino-phenyl)-phenyl	
470	OH	(2-methylsulfonylamino-phenyl)-phenyl	
471	OH	(2-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
472	OH	(3-methylphenyl)-phenyl	
473	OH	(3-isopropylphenyl)-phenyl	
474	OH	(3-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
475	OH	(3-methylsulfonylamino-phenyl)-phenyl	
476	OH	(3-amino-phenyl)-phenyl	
477	OH	(3-nitro-phenyl)-phenyl	
478	OH	2-pyridyl	
479	OH	3-pyridyl	
480	OH	4-pyridyl	
481	OH	3-amino-4-pyridyl	
482	OH	3-hydroxy-4-pyridyl	
483	OH	3-imidazole	
484	OH	2-nitro-3-imidazole	
485	OH	5-thiazole	
486	OH	5-oxazole	
487	OH	4-pyazole	
488	OH	phenylethyl	
489	OH	2-aminophenylethyl	
490	OH	2-methylsulfonylamino-phenylethyl	
491	OH	2-trifluoromethyl-sulfonylamino-phenylethyl	
492	OH	2-hydroxymethylene-phenylethyl	
493	OH	2-aminomethylene-phenylethyl	
494	OH	2-tetrazolephenylethyl	
495	OH	2-tert-butylamino-sulfonylphenylethyl	
496	OH	2-aminosulfonyl-phenylethyl	
497	OH	2-methoxyphenylethyl	
498	OH	3-aminophenylethyl	
499	OH	3-methylsulfonylamino-phenylethyl	
500	OH	3-trifluoromethylsulfonylamin o-phenylethyl	

501	OH	3-hydroxymethylene-phenylethyl	
502	OH	3-aminomethylene-phenylethyl	
503	OH	3-tetrazolephenylethyl	
504	OH	3-tert-butylamino-sulfonylphenylethyl	
505	OH	3-aminosulfonyl-phenylethyl	
506	OH	3-methoxyphenylethyl	
507	NH(CO)CH <sub>3</sub>	H	
508	NH(CO)CH <sub>3</sub>	methyl	
509	NH(CO)CH <sub>3</sub>	ethyl	
510	NH(CO)CH <sub>3</sub>	n-propyl	
511	NH(CO)CH <sub>3</sub>	n-butyl	
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520	NH(CO)CH <sub>3</sub>	cyclohexanyl	
521	NH(CO)CH <sub>3</sub>	cycloheptanyl	
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523	NH(CO)CH <sub>3</sub>	phenylmethyl	
524	NH(CO)CH <sub>3</sub>	3-hydroxyphenyl	
525	NH(CO)CH <sub>3</sub>	3-hydroxy-4-methoxyphenyl	
526	NH(CO)CH <sub>3</sub>	3-fluorophenyl	
527	NH(CO)CH <sub>3</sub>	3-chlorophenyl	
528	NH(CO)CH <sub>3</sub>	3-nitrophenyl	
529	NH(CO)CH <sub>3</sub>	3-aminophenyl	
530	NH(CO)CH <sub>3</sub>	3-methyl-sulfonamidephenyl	
531	NH(CO)CH <sub>3</sub>	3-trifluoro-methylsulfonamidephenyl	
532	NH(CO)CH <sub>3</sub>	3-Ac-NHphenyl	
533	NH(CO)CH <sub>3</sub>	3-Boc-NHphenyl	
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536	NH(CO)CH <sub>3</sub>	3-aminoethylenephphenyl	
537	NH(CO)CH <sub>3</sub>	3-cyanophenyl	
538	NH(CO)CH <sub>3</sub>	3-cyanomethylphenyl	
539	NH(CO)CH <sub>3</sub>	3-hydroxy-methylenephphenyl	
540	NH(CO)CH <sub>3</sub>	3-carboxylphenyl	
541	NH(CO)CH <sub>3</sub>	3-mercaptophenyl	
542	NH(CO)CH <sub>3</sub>	3-methoxyphenyl	
543	NH(CO)CH <sub>3</sub>	3,4-methylenedioxyphenyl	
544	NH(CO)CH <sub>3</sub>	3-tetrazolephenyl	
545	NH(CO)CH <sub>3</sub>	3-aminosulfonylphenyl	
546	NH(CO)CH <sub>3</sub>	3-methylamino-sulfonylphenyl	
547	NH(CO)CH <sub>3</sub>	3-ethylamino-sulfonylphenyl	
548	NH(CO)CH <sub>3</sub>	3-tert-butylamino-sulfonylphenyl	
549	NH(CO)CH <sub>3</sub>	3-methylsulfonylphenyl	
550	NH(CO)CH <sub>3</sub>	4-methoxyphenyl	
551	NH(CO)CH <sub>3</sub>	4-phenylphenyl	

552	NH(CO)CH <sub>3</sub>	(2-hydroxymethylene-phenyl)-phenyl	
553	NH(CO)CH <sub>3</sub>	(2-tert-butylamino-sulfonylphenyl)-phenyl	
554	NH(CO)CH <sub>3</sub>	(2-methylamino-sulfonylphenyl)-phenyl	
555	NH(CO)CH <sub>3</sub>	(2-ethylamino-sulfonylphenyl)-phenyl	
556	NH(CO)CH <sub>3</sub>	(2-aminosulfonyl-phenyl)-phenyl	
557	NH(CO)CH <sub>3</sub>	(2-chlorophenyl)-phenyl	
558	NH(CO)CH <sub>3</sub>	(2-fluorophenyl)-phenyl	
559	NH(CO)CH <sub>3</sub>	(2,4-dichlorophenyl)-phenyl	
560	NH(CO)CH <sub>3</sub>	(2,6-dichlorophenyl)-phenyl	
561	NH(CO)CH <sub>3</sub>	(3,5-dichlorophenyl)-phenyl	
562	NH(CO)CH <sub>3</sub>	(2,3-dichlorophenyl)-phenyl	
563	NH(CO)CH <sub>3</sub>	(2-methylphenyl)-phenyl	
564	NH(CO)CH <sub>3</sub>	(2-tetrazole-phenyl)-phenyl	
565	NH(CO)CH <sub>3</sub>	(2-methoxy-phenyl)-phenyl	
566	NH(CO)CH <sub>3</sub>	(2-tmethyl-phenyl)-phenyl	
567	NH(CO)CH <sub>3</sub>	(2-formyl-phenyl)-phenyl	
568	NH(CO)CH <sub>3</sub>	(2-amino-phenyl)-phenyl	
569	NH(CO)CH <sub>3</sub>	(2-methylamino-phenyl)-phenyl	
570	NH(CO)CH <sub>3</sub>	(2-ethylamino-phenyl)-phenyl	
571	NH(CO)CH <sub>3</sub>	(2-propylamino-phenyl)-phenyl	
572	NH(CO)CH <sub>3</sub>	(2-methylsulfonylamino-phenyl)-phenyl	
573	NH(CO)CH <sub>3</sub>	(2-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
574	NH(CO)CH <sub>3</sub>	(3-methylphenyl)-phenyl	
575	NH(CO)CH <sub>3</sub>	(3-isopropylphenyl)-phenyl	
576	NH(CO)CH <sub>3</sub>	(3-trifluoromethyl-sulfonyl-amino-phenyl)-phenyl	
577	NH(CO)CH <sub>3</sub>	(3-methylsulfonylamino-phenyl)-phenyl	
578	NH(CO)CH <sub>3</sub>	(3-amino-phenyl)-phenyl	
579	NH(CO)CH <sub>3</sub>	(3-nitro-phenyl)-phenyl	
580	NH(CO)CH <sub>3</sub>	2-pyridyl	
581	NH(CO)CH <sub>3</sub>	3-pyridyl	
582	NH(CO)CH <sub>3</sub>	4-pyridyl	
583	NH(CO)CH <sub>3</sub>	3-amino-4-pyridyl	
584	NH(CO)CH <sub>3</sub>	3-hydroxy-4-pyridyl	
585	NH(CO)CH <sub>3</sub>	3-imidazole	
586	NH(CO)CH <sub>3</sub>	2-nitro-3-imidazole	
587	NH(CO)CH <sub>3</sub>	5-thiazole	
588	NH(CO)CH <sub>3</sub>	5-oxazole	
589	NH(CO)CH <sub>3</sub>	4-pyazole	
590	NH(CO)CH <sub>3</sub>	phenylethyl	
591	NH(CO)CH <sub>3</sub>	2-aminophenylethyl	
592	NH(CO)CH <sub>3</sub>	2-methylsulfonylamino-phenylethyl	
593	NH(CO)CH <sub>3</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
594	NH(CO)CH <sub>3</sub>	2-hydroxymethylene-phenylethyl	

595	NH(CO)CH <sub>3</sub>	2-aminomethylene-phenylethyl	
596	NH(CO)CH <sub>3</sub>	2-tetrazolephenylethyl	
597	NH(CO)CH <sub>3</sub>	2-tert-butylamino-sulfonylphenylethyl	
598	NH(CO)CH <sub>3</sub>	2-aminosulfonyl-phenylethyl	
599	NH(CO)CH <sub>3</sub>	2-methoxyphenylethyl	
600	NH(CO)CH <sub>3</sub>	3-aminophenylethyl	
601	NH(CO)CH <sub>3</sub>	3-methylsulfonylamino-phenylethyl	
602	NH(CO)CH <sub>3</sub>	3-trifluoromethyl-sulfonylamino-phenylethyl	
603	NH(CO)CH <sub>3</sub>	3-hydroxymethylene-phenylethyl	
604	NH(CO)CH <sub>3</sub>	3-aminomethylene-phenylethyl	
605	NH(CO)CH <sub>3</sub>	3-tetrazolephenylethyl	
606	NH(CO)CH <sub>3</sub>	3-tert-butylamino-sulfonylphenylethyl	
607	NH(CO)CH <sub>3</sub>	3-aminosulfonyl-phenylethyl	
608	NH(CO)CH <sub>3</sub>	3-methoxyphenylethyl	
609			
610	NH(CO)C <sub>2</sub> H <sub>5</sub>	H	
611	NH(CO)C <sub>2</sub> H <sub>5</sub>	methyl	
612	NH(CO)C <sub>2</sub> H <sub>5</sub>	ethyl	
613	NH(CO)C <sub>2</sub> H <sub>5</sub>	n-propyl	
614	NH(CO)C <sub>2</sub> H <sub>5</sub>	n-butyl	
615	NH(CO)C <sub>2</sub> H <sub>5</sub>	n-pentyl	
616	NH(CO)C <sub>2</sub> H <sub>5</sub>	n-hexanyl	
617	NH(CO)C <sub>2</sub> H <sub>5</sub>	n-heptanyl	
618	NH(CO)C <sub>2</sub> H <sub>5</sub>	isopropyl	
619	NH(CO)C <sub>2</sub> H <sub>5</sub>	tert-butyl	
620	NH(CO)C <sub>2</sub> H <sub>5</sub>	cyclopropyl	
621	NH(CO)C <sub>2</sub> H <sub>5</sub>	cyclobutanyl	
622	NH(CO)C <sub>2</sub> H <sub>5</sub>	cyclopentanyl	
623	NH(CO)C <sub>2</sub> H <sub>5</sub>	cyclohexanyl	
624	NH(CO)C <sub>2</sub> H <sub>5</sub>	cycloheptanyl	
625	NH(CO)C <sub>2</sub> H <sub>5</sub>	phenyl	
626	NH(CO)C <sub>2</sub> H <sub>5</sub>	phenylmethyl	
627	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-hydroxyphenyl	
628	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-hydroxy-4-methoxyphenyl	
629	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-fluorophenyl	
630	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-chlorophenyl	
631	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-nitrophenyl	
632	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-aminophenyl	
633	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-methylsulfonylamidephenyl	
634	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-trifluoro-methylsulfonylamidephenyl	
635	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-Ac-NHphenyl	
636	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-Boc-NHphenyl	
637	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-Cbz-NHphenyl	
638	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-aminomethylenepheryl	
639	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-aminoethylenepheryl	
640	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-cyanophenyl	
641	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-cyanomethylphenyl	
642	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-hydroxymethylenepheryl	
643	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-carboxylphenyl	
644	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-mercaptophenyl	
645	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-methoxyphenyl	



646	NH(CO)C <sub>2</sub> H <sub>5</sub>	3,4-methylenedioxyphenyl	
647	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-tetrazolephenyl	
648	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-aminosulfonylphenyl	
649	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-methylamino-sulfonylphenyl	
650	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-ethylamino-sulfonylphenyl	
651	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-tert-butylamino-sulfonylphenyl	
652	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-methylsulfonylphenyl	
653	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-methoxyphenyl	
654	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-phenylphenyl	
655	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-hydroxymethylene-phenyl)-phenyl	
656	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
657	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-methylamino-sulfonylphenyl)-phenyl	
658	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-ethylamino-sulfonylphenyl)-phenyl	
659	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-aminosulfonyl-phenyl)-phenyl	
660	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-chlorophenyl)-phenyl	
661	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-fluorophenyl)-phenyl	
662	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2,4-dichlorophenyl)-phenyl	
663	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2,6-dichlorophenyl)-phenyl	
664	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3,5-dichlorophenyl)-phenyl	
665	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2,3-dichlorophenyl)-phenyl	
666	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-methylphenyl)-phenyl	
667	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-tetrazole-phenyl)-phenyl	
668	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-methoxy-phenyl)-phenyl	
669	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-tmethyl-phenyl)-phenyl	
670	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-formyl-phenyl)-phenyl	
671	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-amino-phenyl)-phenyl	
672	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-methylamino-phenyl)-phenyl	
673	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-ethylamino-phenyl)-phenyl	
674	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-propylamino-phenyl)-phenyl	
675	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-methylsulfonylamino-phenyl)-phenyl	
676	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
677	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-methylphenyl)-phenyl	
678	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-isopropylphenyl)-phenyl	
679	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
680	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
681	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-amino-phenyl)-phenyl	
682	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-(3-nitro-phenyl)-phenyl	
683	NH(CO)C <sub>2</sub> H <sub>5</sub>	2-pyridyl	
684	NH(CO)C <sub>2</sub> H <sub>5</sub>	3-pyridyl	
685	NH(CO)C <sub>2</sub> H <sub>5</sub>	4-pyridyl	

686	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-amino-4-pyridyl	
687	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-hydroxy-4-pyridyl	
688	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-imidazole	
689	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-nitro-3-imidazole	
690	NH (CO) C <sub>2</sub> H <sub>5</sub>	5-thiazole	
691	NH (CO) C <sub>2</sub> H <sub>5</sub>	5-oxazole	
692	NH (CO) C <sub>2</sub> H <sub>5</sub>	4-pyazole	
693	NH (CO) C <sub>2</sub> H <sub>5</sub>	phenylethyl	
694	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-aminophenylethyl	
695	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-methylsulfonylamino-phenylethyl	
696	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
697	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-hydroxymethylene-phenylethyl	
698	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-aminomethylene-phenylethyl	
699	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-tetrazolephenylethyl	
700	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-tert-butylamino-sulfonylphenylethyl	
701	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-aminosulfonyl-phenylethyl	
702	NH (CO) C <sub>2</sub> H <sub>5</sub>	2-methoxyphenylethyl	
703	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-aminophenylethyl	
704	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-methylsulfonylamino-phenylethyl	
705	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-trifluoromethylsulfonylamino-phenylethyl	
706	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-hydroxymethylene-phenylethyl	
707	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-aminomethylene-phenylethyl	
708	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-tetrazolephenylethyl	
709	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-tert-butylamino-sulfonylphenylethyl	
710	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-aminosulfonyl-phenylethyl	
711	NH (CO) C <sub>2</sub> H <sub>5</sub>	3-methoxyphenylethyl	
712	NH (CO) OC <sub>2</sub> H <sub>5</sub>	H	
713	NH (CO) OC <sub>2</sub> H <sub>5</sub>	methyl	
714	NH (CO) OC <sub>2</sub> H <sub>5</sub>	ethyl	
715	NH (CO) OC <sub>2</sub> H <sub>5</sub>	n-propyl	
716	NH (CO) OC <sub>2</sub> H <sub>5</sub>	n-butyl	
717	NH (CO) OC <sub>2</sub> H <sub>5</sub>	n-pentyl	
718	NH (CO) OC <sub>2</sub> H <sub>5</sub>	n-hexanyl	
719	NH (CO) OC <sub>2</sub> H <sub>5</sub>	n-heptanyl	
720	NH (CO) OC <sub>2</sub> H <sub>5</sub>	isopropyl	
721	NH (CO) OC <sub>2</sub> H <sub>5</sub>	tert-butyl	
722	NH (CO) OC <sub>2</sub> H <sub>5</sub>	cyclopropyl	
723	NH (CO) OC <sub>2</sub> H <sub>5</sub>	cyclobutanyl	
724	NH (CO) OC <sub>2</sub> H <sub>5</sub>	cyclopentanyl	
725	NH (CO) OC <sub>2</sub> H <sub>5</sub>	cyclohexanyl	
726	NH (CO) OC <sub>2</sub> H <sub>5</sub>	cycloheptanyl	
727	NH (CO) OC <sub>2</sub> H <sub>5</sub>	phenyl	
728	NH (CO) OC <sub>2</sub> H <sub>5</sub>	phenylmethyl	
729	NH (CO) OC <sub>2</sub> H <sub>5</sub>	3-hydroxyphenyl	
730	NH (CO) OC <sub>2</sub> H <sub>5</sub>	3-hydroxy-4-methoxyphenyl	
731	NH (CO) OC <sub>2</sub> H <sub>5</sub>	3-fluorophenyl	
732	NH (CO) OC <sub>2</sub> H <sub>5</sub>	3-chlorophenyl	

733	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-nitrophenyl	
734	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminophenyl	
735	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methyl-sulfonamidephenyl	
736	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-trifluoro-methylsulfonamidephenyl	
737	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-Ac-NHphenyl	
738	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-Boc-NHphenyl	
739	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-Cbz-NHphenyl	
740	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminomethylenephphenyl	
741	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminoethylenephphenyl	
742	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-cyanophenyl	
743	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-cyanomethylphenyl	
744	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-hydroxy-methylenephphenyl	
745	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-carboxylphenyl	
746	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-mercaptophenyl	
747	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methoxyphenyl	
748	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3,4-methylenedioxyphenyl	
749	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-tetrazolephenyl	
750	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminosulfonylphenyl	
751	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methylamino-sulfonylphenyl	
752	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-ethylamino-sulfonylphenyl	
753	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-tert-butylamino-sulfonylphenyl	
754	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methylsulfonylphenyl	
755	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-methoxyphenyl	
756	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-phenylphenyl	
757	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-hydroxymethylene-phenyl)-phenyl	
758	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
759	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methylamino-sulfonylphenyl)-phenyl	
760	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-ethylamino-sulfonylphenyl)-phenyl	
761	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-aminosulfonyl-phenyl)-phenyl	
762	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-chlorophenyl)-phenyl	
763	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-fluorophenyl)-phenyl	
764	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2,4-dichlorophenyl)-phenyl	
765	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2,6-dichlorophenyl)-phenyl	
766	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3,5-dichlorophenyl)-phenyl	
767	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2,3-dichlorophenyl)-phenyl	
768	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methylphenyl)-phenyl	
769	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-tetrazole-phenyl)-phenyl	
770	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methoxy-phenyl)-phenyl	
771	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methyl-phenyl)-phenyl	
772	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-formyl-phenyl)-phenyl	
773	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-amino-phenyl)-phenyl	
774	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methylamino-phenyl)-phenyl	
775	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-ethylamino-phenyl)-phenyl	
776	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-propylamino-phenyl)-phenyl	

777	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-methylsulfonylamino-phenyl)-phenyl	
778	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
779	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-methylphenyl)-phenyl	
780	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-isopropylphenyl)-phenyl	
781	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
782	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
783	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-amino-phenyl)-phenyl	
784	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-(3-nitro-phenyl)-phenyl	
785	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-pyridyl	
786	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-pyridyl	
787	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-pyridyl	
788	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-amino-4-pyridyl	
789	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-hydroxy-4-pyridyl	
790	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-imidazole	
791	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-nitro-3-imidazole	
792	NH(CO)OC <sub>2</sub> H <sub>5</sub>	5-thiazole	
793	NH(CO)OC <sub>2</sub> H <sub>5</sub>	5-oxazole	
794	NH(CO)OC <sub>2</sub> H <sub>5</sub>	4-pyazole	
795	NH(CO)OC <sub>2</sub> H <sub>5</sub>	phenylethyl	
796	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-aminophenylethyl	
797	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-methylsulfonylamino-phenylethyl	
798	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
799	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-hydroxymethylene-phenylethyl	
800	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-aminomethylene-phenylethyl	
801	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-tetrazolephenylethyl	
802	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-tert-butylamino-sulfonylphenylethyl	
803	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-aminosulfonyl-phenylethyl	
804	NH(CO)OC <sub>2</sub> H <sub>5</sub>	2-methoxyphenylethyl	
805	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminophenylethyl	
806	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methylsulfonylamino-phenylethyl	
807	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-trifluoromethylsulfonylamino-phenylethyl	
808	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-hydroxymethylene-phenylethyl	
809	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminomethylene-phenylethyl	
810	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-tetrazolephenylethyl	
811	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-tert-butylamino-sulfonylphenylethyl	
812	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-aminosulfonyl-phenylethyl	
813	NH(CO)OC <sub>2</sub> H <sub>5</sub>	3-methoxyphenylethyl	
814	NH(CO)OCH <sub>3</sub>	H	
815	NH(CO)OCH <sub>3</sub>	methyl	
816	NH(CO)OCH <sub>3</sub>	ethyl	
817	NH(CO)OCH <sub>3</sub>	n-propyl	
818	NH(CO)OCH <sub>3</sub>	n-butyl	

819	NH(CO)OCH <sub>3</sub>	n-pentyl	
820	NH(CO)OCH <sub>3</sub>	n-hexanyl	
821	NH(CO)OCH <sub>3</sub>	n-heptanyl	
822	NH(CO)OCH <sub>3</sub>	isopropyl	
823	NH(CO)OCH <sub>3</sub>	tert-butyl	
824	NH(CO)OCH <sub>3</sub>	cyclopropyl	
825	NH(CO)OCH <sub>3</sub>	cyclobutanyl	
826	NH(CO)OCH <sub>3</sub>	cyclopentanyl	
827	NH(CO)OCH <sub>3</sub>	cyclohexanyl	
828	NH(CO)OCH <sub>3</sub>	cycloheptanyl	
829	NH(CO)OCH <sub>3</sub>	phenyl	
830	NH(CO)OCH <sub>3</sub>	phenylmethyl	
831	NH(CO)OCH <sub>3</sub>	3-hydroxyphenyl	
832	NH(CO)OCH <sub>3</sub>	3-hydroxy-4-methoxyphenyl	
833	NH(CO)OCH <sub>3</sub>	3-fluorophenyl	
834	NH(CO)OCH <sub>3</sub>	3-chlorophenyl	
835	NH(CO)OCH <sub>3</sub>	3-nitrophenyl	
836	NH(CO)OCH <sub>3</sub>	3-aminophenyl	
837	NH(CO)OCH <sub>3</sub>	3-methylsulfonamidephenyl	
838	NH(CO)OCH <sub>3</sub>	3-trifluoro- methylsulfonamidephenyl	
839	NH(CO)OCH <sub>3</sub>	3-Ac-NHphenyl	
840	NH(CO)OCH <sub>3</sub>	3-Boc-NHphenyl	
841	NH(CO)OCH <sub>3</sub>	3-Cbz-NHphenyl	
842	NH(CO)OCH <sub>3</sub>	3-aminomethylenepheryl	
843	NH(CO)OCH <sub>3</sub>	3-aminoethylenepheryl	
844	NH(CO)OCH <sub>3</sub>	3-cyanophenyl	
845	NH(CO)OCH <sub>3</sub>	3-cyanomethylphenyl	
846	NH(CO)OCH <sub>3</sub>	3-hydroxy-methylenepheryl	
847	NH(CO)OCH <sub>3</sub>	3-carboxylphenyl	
848	NH(CO)OCH <sub>3</sub>	3-mercaptophenyl	
849	NH(CO)OCH <sub>3</sub>	3-methoxyphenyl	
850	NH(CO)OCH <sub>3</sub>	3,4-methylenedioxophenyl	
851	NH(CO)OCH <sub>3</sub>	3-tetrazolephenyl	
852	NH(CO)OCH <sub>3</sub>	3-aminosulfonylphenyl	
853	NH(CO)OCH <sub>3</sub>	3-methylamino- sulfonylphenyl	
854	NH(CO)OCH <sub>3</sub>	3-ethylamino-sulfonylphenyl	
855	NH(CO)OCH <sub>3</sub>	3-tert-butylamino- sulfonylphenyl	
856	NH(CO)OCH <sub>3</sub>	3-methylsulfonylphenyl	
857	NH(CO)OCH <sub>3</sub>	4-methoxyphenyl	
858	NH(CO)OCH <sub>3</sub>	4-phenylphenyl	
859	NH(CO)OCH <sub>3</sub>	4-(2-hydroxymethylene- phenyl)-phenyl	
860	NH(CO)OCH <sub>3</sub>	4-(2-tert-butylamino- sulfonylphenyl)-phenyl	
861	NH(CO)OCH <sub>3</sub>	4-(2-methylamino- sulfonylphenyl)-phenyl	
862	NH(CO)OCH <sub>3</sub>	4-(2-ethylamino- sulfonylphenyl)-phenyl	
863	NH(CO)OCH <sub>3</sub>	4-(2-aminosulfonyl-phenyl)- phenyl	
864	NH(CO)OCH <sub>3</sub>	4-(2-chlorophenyl)-phenyl	
865	NH(CO)OCH <sub>3</sub>	4-(2-fluorophenyl)-phenyl	
866	NH(CO)OCH <sub>3</sub>	4-(2,4-dichlorophenyl)- phenyl	
867	NH(CO)OCH <sub>3</sub>	4-(2,6-dichlorophenyl)- phenyl	

868	NH(CO)OCH <sub>3</sub>	4-(3,5-dichlorophenyl)-phenyl	
869	NH(CO)OCH <sub>3</sub>	4-(2,3-dichlorophenyl)-phenyl	
870	NH(CO)OCH <sub>3</sub>	4-(2-methylphenyl)-phenyl	
871	NH(CO)OCH <sub>3</sub>	4-(2-tetrazole-phenyl)-phenyl	
872	NH(CO)OCH <sub>3</sub>	4-(2-methoxy-phenyl)-phenyl	
873	NH(CO)OCH <sub>3</sub>	4-(2-tmethyl-phenyl)-phenyl	
874	NH(CO)OCH <sub>3</sub>	4-(2-formyl-phenyl)-phenyl	
875	NH(CO)OCH <sub>3</sub>	4-(2-amino-phenyl)-phenyl	
876	NH(CO)OCH <sub>3</sub>	4-(2-methylamino-phenyl)-phenyl	
877	NH(CO)OCH <sub>3</sub>	4-(2-ethylamino-phenyl)-phenyl	
878	NH(CO)OCH <sub>3</sub>	4-(2-propylamino-phenyl)-phenyl	
879	NH(CO)OCH <sub>3</sub>	4-(2-methylsulfonylamino-phenyl)-phenyl	
880	NH(CO)OCH <sub>3</sub>	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
881	NH(CO)OCH <sub>3</sub>	4-(3-methylphenyl)-phenyl	
882	NH(CO)OCH <sub>3</sub>	4-(3-isopropylphenyl)-phenyl	
883	NH(CO)OCH <sub>3</sub>	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
884	NH(CO)OCH <sub>3</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
885	NH(CO)OCH <sub>3</sub>	4-(3-amino-phenyl)-phenyl	
886	NH(CO)OCH <sub>3</sub>	4-(3-nitro-phenyl)-phenyl	
887	NH(CO)OCH <sub>3</sub>	2-pyridyl	
888	NH(CO)OCH <sub>3</sub>	3-pyridyl	
889	NH(CO)OCH <sub>3</sub>	4-pyridyl	
890	NH(CO)OCH <sub>3</sub>	3-amino-4-pyridyl	
891	NH(CO)OCH <sub>3</sub>	3-hydroxy-4-pyridyl	
892	NH(CO)OCH <sub>3</sub>	3-imidazole	
893	NH(CO)OCH <sub>3</sub>	2-nitro-3-imidazole	
894	NH(CO)OCH <sub>3</sub>	5-thiazole	
895	NH(CO)OCH <sub>3</sub>	5-oxazole	
896	NH(CO)OCH <sub>3</sub>	4-pyazole	
897	NH(CO)OCH <sub>3</sub>	phenylethyl	
898	NH(CO)OCH <sub>3</sub>	2-aminophenylethyl	
899	NH(CO)OCH <sub>3</sub>	2-methylsulfonylamino-phenylethyl	
900	NH(CO)OCH <sub>3</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
901	NH(CO)OCH <sub>3</sub>	2-hydroxymethylene-phenylethyl	
902	NH(CO)OCH <sub>3</sub>	2-aminomethylene-phenylethyl	
903	NH(CO)OCH <sub>3</sub>	2-tetrazolephenylethyl	
904	NH(CO)OCH <sub>3</sub>	2-tert-butylamino-sulfonylphenylethyl	
905	NH(CO)OCH <sub>3</sub>	2-aminosulfonyl-phenylethyl	
906	NH(CO)OCH <sub>3</sub>	2-methoxyphenylethyl	
907	NH(CO)OCH <sub>3</sub>	3-aminophenylethyl	
908	NH(CO)OCH <sub>3</sub>	3-methylsulfonylamino-phenylethyl	

909	NH(CO)OCH <sub>3</sub>	3-trifluoromethyl-sulfonylamino-phenylethyl	
910	NH(CO)OCH <sub>3</sub>	3-hydroxymethylene-phenylethyl	
911	NH(CO)OCH <sub>3</sub>	3-aminomethylene-phenylethyl	
912	NH(CO)OCH <sub>3</sub>	3-tetrazolephenylethyl	
913	NH(CO)OCH <sub>3</sub>	3-tert-butylamino-sulfonylphenylethyl	
914	NH(CO)OCH <sub>3</sub>	3-aminosulfonyl-phenylethyl	
915	NH(CO)OCH <sub>3</sub>	3-methoxyphenylethyl	
916	NHBoc	H	
917	NHBoc	methyl	
918	NHBoc	ethyl	
919	NHBoc	n-propyl	
920	NHBoc	n-butyl	
921	NHBoc	n-pentyl	
922	NHBoc	n-hexanyl	
923	NHBoc	n-heptanyl	
924	NHBoc	isopropyl	
925	NHBoc	tert-butyl	
926	NHBoc	cyclopropyl	
927	NHBoc	cyclobutanyl	
928	NHBoc	cyclopentanyl	
929	NHBoc	cyclohexanyl	
930	NHBoc	cycloheptanyl	
931	NHBoc	phenyl	
932	NHBoc	phenylmethyl	
933	NHBoc	3-hydroxyphenyl	
934	NHBoc	3-hydroxy-4-methoxyphenyl	
935	NHBoc	3-fluorophenyl	
936	NHBoc	3-chlorophenyl	
937	NHBoc	3-nitrophenyl	
938	NHBoc	3-aminophenyl	
939	NHBoc	3-methyl-sulfonamidephenyl	
940	NHBoc	3-trifluoro-methylsulfonamidephenyl	
941	NHBoc	3-Ac-NHphenyl	
942	NHBoc	3-Boc-NHphenyl	
943	NHBoc	3-Cbz-NHphenyl	
944	NHBoc	3-aminomethylenephenyl	
945	NHBoc	3-aminoethylenephenyl	
946	NHBoc	3-cyanophenyl	
947	NHBoc	3-cyanomethylphenyl	
948	NHBoc	3-hydroxymethylenephenyl	
949	NHBoc	3-carboxylphenyl	
950	NHBoc	3-mercaptophenyl	
951	NHBoc	3-methoxyphenyl	
952	NHBoc	3,4-methylenedioxyphenyl	
953	NHBoc	3-tetrazolephenyl	
954	NHBoc	3-aminosulfonylphenyl	
955	NHBoc	3-methylamino-sulfonylphenyl	
956	NHBoc	3-ethylamino-sulfonylphenyl	
957	NHBoc	3-tert-butylamino-sulfonylphenyl	
958	NHBoc	3-methylsulfonylphenyl	
959	NHBoc	4-methoxyphenyl	
960	NHBoc	4-phenylphenyl	
961	NHBoc	4-(2-hydroxymethylene-phenyl)-phenyl	
962	NHBoc	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	

963	NHBoc	4-(2-methylamino-sulfonylphenyl)-phenyl	
964	NHBoc	4-(2-ethylamino-sulfonylphenyl)-phenyl	
965	NHBoc	4-(2-aminosulfonyl-phenyl)-phenyl	
966	NHBoc	4-(2-chlorophenyl)-phenyl	
967	NHBoc	4-(2-fluorophenyl)-phenyl	
968	NHBoc	4-(2,4-dichlorophenyl)-phenyl	
969	NHBoc	4-(2,6-dichlorophenyl)-phenyl	
970	NHBoc	4-(3,5-dichlorophenyl)-phenyl	
971	NHBoc	4-(2,3-dichlorophenyl)-phenyl	
972	NHBoc	4-(2-methylphenyl)-phenyl	
973	NHBoc	4-(2-tetrazole-phenyl)-phenyl	
974	NHBoc	4-(2-methoxy-phenyl)-phenyl	
975	NHBoc	4-(2-tmethyl-phenyl)-phenyl	
976	NHBoc	4-(2-formyl-phenyl)-phenyl	
977	NHBoc	4-(2-amino-phenyl)-phenyl	
978	NHBoc	4-(2-methylamino-phenyl)-phenyl	
979	NHBoc	4-(2-ethylamino-phenyl)-phenyl	
980	NHBoc	4-(2-propylamino-phenyl)-phenyl	
981	NHBoc	4-(2-methylsulfonylamino-phenyl)-phenyl	
982	NHBoc	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
983	NHBoc	4-(3-methylphenyl)-phenyl	
984	NHBoc	4-(3-isopropylphenyl)-phenyl	
985	NHBoc	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
986	NHBoc	4-(3-methylsulfonylamino-phenyl)-phenyl	
987	NHBoc	4-(3-amino-phenyl)-phenyl	
988	NHBoc	4-(3-nitro-phenyl)-phenyl	
989	NHBoc	2-pyridyl	
990	NHBoc	3-pyridyl	
991	NHBoc	4-pyridyl	
992	NHBoc	3-amino-4-pyridyl	
993	NHBoc	3-hydroxy-4-pyridyl	
994	NHBoc	3-imidazole	
995	NHBoc	2-nitro-3-imidazole	
996	NHBoc	5-thiazole	
997	NHBoc	5-oxazole	
998	NHBoc	4-pyazole	
999	NHBoc	phenylethyl	
1000	NHBoc	2-aminophenylethyl	
1001	NHBoc	2-methylsulfonylamino-phenylethyl	
1002	NHBoc	2-trifluoromethylsulfonylamino-phenylethyl	
1003	NHBoc	2-hydroxymethylene-phenylethyl	
1004	NHBoc	2-aminomethylene-phenylethyl	



1005	NHBoc	2-tetrazolephenylethyl	
1006	NHBoc	2-tert-butylamino-sulfonylphenylethyl	
1007	NHBoc	2-aminosulfonyl-phenylethyl	
1008	NHBoc	2-methoxyphenylethyl	
1009	NHBoc	3-aminophenylethyl	
1010	NHBoc	3-methylsulfonylamino-phenylethyl	
1011	NHBoc	3-trifluoromethylsulfonylamino-phenylethyl	
1012	NHBoc	3-hydroxymethylene-phenylethyl	
1013	NHBoc	3-aminomethylene-phenylethyl	
1014	NHBoc	3-tetrazolephenylethyl	
1015	NHBoc	3-tert-butylamino-sulfonylphenylethyl	
1016	NHBoc	3-aminosulfonyl-phenylethyl	
1017	NHBoc	3-methoxyphenylethyl	
1018	NH(CO)OCH <sub>2</sub> -4-pyridyl	H	
1019	NH(CO)OCH <sub>2</sub> -4-pyridyl	methyl	
1020	NH(CO)OCH <sub>2</sub> -4-pyridyl	ethyl	
1021	NH(CO)OCH <sub>2</sub> -4-pyridyl	n-propyl	
1022	NH(CO)OCH <sub>2</sub> -4-pyridyl	n-butyl	
1023	NH(CO)OCH <sub>2</sub> -4-pyridyl	n-pentyl	
1024	NH(CO)OCH <sub>2</sub> -4-pyridyl	n-hexanyl	
1025	NH(CO)OCH <sub>2</sub> -4-pyridyl	n-heptanyl	
1026	NH(CO)OCH <sub>2</sub> -4-pyridyl	isopropyl	
1027	NH(CO)OCH <sub>2</sub> -4-pyridyl	tert-butyl	
1028	NH(CO)OCH <sub>2</sub> -4-pyridyl	cyclopropyl	
1029	NH(CO)OCH <sub>2</sub> -4-pyridyl	cyclobutanyl	
1030	NH(CO)OCH <sub>2</sub> -4-pyridyl	cyclopentanyl	
1031	NH(CO)OCH <sub>2</sub> -4-pyridyl	cyclohexanyl	
1032	NH(CO)OCH <sub>2</sub> -4-pyridyl	cycloheptanyl	
1033	NH(CO)OCH <sub>2</sub> -4-pyridyl	phenyl	
1034	NH(CO)OCH <sub>2</sub> -4-pyridyl	phenylmethyl	
1035	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-hydroxyphenyl	
1036	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-hydroxy-4-methoxyphenyl	
1037	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-fluorophenyl	
1038	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-chlorophenyl	
1039	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-nitrophenyl	
1040	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminophenyl	
1041	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methyl-sulfonamidephenyl	
1042	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-trifluoro-methylsulfonamidephenyl	
1043	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-Ac-NHphenyl	
1044	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-Boc-NHphenyl	
1045	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-Cbz-NHphenyl	
1046	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminomethylenephenyl	
1047	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminoethylenephenyl	
1048	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-cyanophenyl	
1049	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-cyanomethylphenyl	
1050	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-hydroxymethylenephenyl	
1051	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-carboxylphenyl	
1052	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-mercaptophenyl	
1053	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methoxyphenyl	
1054	NH(CO)OCH <sub>2</sub> -4-pyridyl	3,4-methylenedioxophenyl	
1055	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-tetrazolephenyl	

1056	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminosulfonylphenyl	
1057	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methylamino-sulfonylphenyl	
1058	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-ethylamino-sulfonylphenyl	
1059	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-tert-butylamino-sulfonylphenyl	
1060	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methylsulfonylphenyl	
1061	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-methoxyphenyl	
1062	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-phenylphenyl	
1063	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-hydroxymethylene-phenyl)-phenyl	
1064	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
1065	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-methylamino-sulfonylphenyl)-phenyl	
1066	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1067	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-aminosulfonyl-phenyl)-phenyl	
1068	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-chlorophenyl)-phenyl	
1069	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-fluorophenyl)-phenyl	
1070	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2,4-dichlorophenyl)-phenyl	
1071	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2,6-dichlorophenyl)-phenyl	
1072	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3,5-dichlorophenyl)-phenyl	
1073	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2,3-dichlorophenyl)-phenyl	
1074	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-methylphenyl)-phenyl	
1075	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-tetrazole-phenyl)-phenyl	
1076	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-methoxy-phenyl)-phenyl	
1077	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-tmethyl-phenyl)-phenyl	
1078	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-formyl-phenyl)-phenyl	
1079	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-amino-phenyl)-phenyl	
1080	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-methylamino-phenyl)-phenyl	
1081	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-ethylamino-phenyl)-phenyl	
1082	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-propylamino-phenyl)-phenyl	
1083	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-methylsulfonylamino-phenyl)-phenyl	
1084	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
1085	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-methylphenyl)-phenyl	
1086	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-isopropylphenyl)-phenyl	
1087	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
1088	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-methylsulfonylamino-phenyl)-phenyl	
1089	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-amino-phenyl)-phenyl	
1090	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-(3-nitro-phenyl)-phenyl	
1091	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-pyridyl	
1092	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-pyridyl	
1093	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-pyridyl	
1094	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-amino-4-pyridyl	
1095	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-hydroxy-4-pyridyl	

1096	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-imidazole	
1097	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-nitro-3-imidazole	
1098	NH(CO)OCH <sub>2</sub> -4-pyridyl	5-thiazole	
1099	NH(CO)OCH <sub>2</sub> -4-pyridyl	5-oxazole	
1100	NH(CO)OCH <sub>2</sub> -4-pyridyl	4-pyazole	
1101	NH(CO)OCH <sub>2</sub> -4-pyridyl	phenylethyl	
1102	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-aminophenylethyl	
1103	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-methylsulfonylamino-phenylethyl	
1104	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-trifluoromethylsulfonylamino-phenylethyl	
1105	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-hydroxymethylene-phenylethyl	
1106	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-aminomethylene-phenylethyl	
1107	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-tetrazolephenylethyl	
1108	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-tertbutylamino-sulfonylphenylethyl	
1109	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-aminosulfonyl-phenylethyl	
1110	NH(CO)OCH <sub>2</sub> -4-pyridyl	2-methoxyphenylethyl	
1111	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminophenylethyl	
1112	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methylsulfonylamino-phenylethyl	
1113	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-trifluoromethylsulfonylamino-phenylethyl	
1114	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-hydroxymethylene-phenylethyl	
1115	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminomethylene-phenylethyl	
1116	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-tetrazolephenylethyl	
1117	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-tert-butylamino-sulfonylphenylethyl	
1118	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-aminosulfonyl-phenylethyl	
1119	NH(CO)OCH <sub>2</sub> -4-pyridyl	3-methoxyphenylethyl	
1120	NHS(O <sub>2</sub> )CH <sub>3</sub>	H	
1121	NHS(O <sub>2</sub> )CH <sub>3</sub>	methyl	
1122	NHS(O <sub>2</sub> )CH <sub>3</sub>	ethyl	
1123	NHS(O <sub>2</sub> )CH <sub>3</sub>	n-propyl	
1124	NHS(O <sub>2</sub> )CH <sub>3</sub>	n-butyl	
1125	NHS(O <sub>2</sub> )CH <sub>3</sub>	n-pentyl	
1126	NHS(O <sub>2</sub> )CH <sub>3</sub>	n-hexanyl	
1127	NHS(O <sub>2</sub> )CH <sub>3</sub>	n-heptanyl	
1128	NHS(O <sub>2</sub> )CH <sub>3</sub>	isopropyl	
1129	NHS(O <sub>2</sub> )CH <sub>3</sub>	tert-butyl	
1130	NHS(O <sub>2</sub> )CH <sub>3</sub>	cyclopropyl	
1131	NHS(O <sub>2</sub> )CH <sub>3</sub>	cyclobutanyl	
1132	NHS(O <sub>2</sub> )CH <sub>3</sub>	cyclopentanyl	
1133	NHS(O <sub>2</sub> )CH <sub>3</sub>	cyclohexanyl	
1134	NHS(O <sub>2</sub> )CH <sub>3</sub>	cycloheptanyl	
1135	NHS(O <sub>2</sub> )CH <sub>3</sub>	phenyl	
1136	NHS(O <sub>2</sub> )CH <sub>3</sub>	phenylmethyl	
1137	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-hydroxyphenyl	
1138	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-hydroxy-4-methoxyphenyl	
1139	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-fluorophenyl	
1140	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-chlorophenyl	
1141	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-nitrophenyl	
1142	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-aminophenyl	

1143	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-methyl-sulfonamidephenyl	
1144	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-trifluoro-methylsulfonamidephenyl	
1145	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-Ac-NHphenyl	
1146	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-Boc-NHphenyl	
1147	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-Cbz-NHphenyl	
1148	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-aminomethylenephenyl	
1149	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-aminoethylenephenyl	
1150	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-cyanophenyl	
1151	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-cyanomethylphenyl	
1152	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-hydroxymethylenephenyl	
1153	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-carboxylphenyl	
1154	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-mercaptophenyl	
1155	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-methoxyphenyl	
1156	NHS(O <sub>2</sub> )CH <sub>3</sub>	3,4-methylenedioxophenyl	
1157	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-tetrazolephenyl	
1158	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-aminosulfonylphenyl	
1159	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-methylamino-sulfonylphenyl	
1160	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-ethylamino-sulfonylphenyl	
1161	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-tertbutylamino-sulfonylphenyl	
1162	NHS(O <sub>2</sub> )CH <sub>3</sub>	3-methylsulfonylphenyl	
1163	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-methoxyphenyl	
1164	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-phenylphenyl	
1165	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-hydroxymethylene-phenyl)-phenyl	
1166	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
1167	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-methylamino-sulfonylphenyl)-phenyl	
1168	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1169	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-aminosulfonyl-phenyl)-phenyl	
1170	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-chlorophenyl)-phenyl	
1171	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-fluorophenyl)-phenyl	
1172	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2,4-dichlorophenyl)-phenyl	
1173	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2,6-dichlorophenyl)-phenyl	
1174	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(3,5-dichlorophenyl)-phenyl	
1175	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2,3-dichlorophenyl)-phenyl	
1176	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-methylphenyl)-phenyl	
1177	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-tetrazole-phenyl)-phenyl	
1178	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-methoxy-phenyl)-phenyl	
1179	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-tmethyl-phenyl)-phenyl	
1180	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-formyl-phenyl)-phenyl	
1181	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-amino-phenyl)-phenyl	
1182	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-methylamino-phenyl)-phenyl	
1183	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-ethylamino-phenyl)-phenyl	
1184	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-propylamino-phenyl)-phenyl	
1185	NHS(O <sub>2</sub> )CH <sub>3</sub>	4-(2-methylsulfonyl-aminophenyl)-phenyl	

1186	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(2-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
1187	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-methylphenyl)-phenyl	
1188	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-isopropylphenyl)-phenyl	
1189	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
1190	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
1191	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-amino-phenyl)-phenyl	
1192	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-(3-nitro-phenyl)-phenyl	
1193	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-pyridyl	
1194	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-pyridyl	
1195	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-pyridyl	
1196	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-amino-4-pyridyl	
1197	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-hydroxy-4-pyridyl	
1198	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-imidazole	
1199	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-nitro-3-imidazole	
1200	NHS (O <sub>2</sub> ) CH <sub>3</sub>	5-thiazole	
1201	NHS (O <sub>2</sub> ) CH <sub>3</sub>	5-oxazole	
1202	NHS (O <sub>2</sub> ) CH <sub>3</sub>	4-pyazole	
1203	NHS (O <sub>2</sub> ) CH <sub>3</sub>	phenylethyl	
1204	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-aminophenylethyl	
1205	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-methylsulfonylamino-phenylethyl	
1206	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
1207	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-hydroxymethylene-phenylethyl	
1208	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-aminomethylene-phenylethyl	
1209	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-tetrazolephenylethyl	
1210	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-tert-butylamino-sulfonylphenylethyl	
1211	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-aminosulfonyl-phenylethyl	
1212	NHS (O <sub>2</sub> ) CH <sub>3</sub>	2-methoxyphenylethyl	
1213	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-aminophenylethyl	
1214	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-methylsulfonylamino-phenylethyl	
1215	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-trifluoromethylsulfonylamino-phenylethyl	
1216	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-hydroxymethylene-phenylethyl	
1217	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-aminomethylene-phenylethyl	
1218	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-tetrazolephenylethyl	
1219	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-tert-butylamino-sulfonylphenylethyl	
1220	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-aminosulfonyl-phenylethyl	
1221	NHS (O <sub>2</sub> ) CH <sub>3</sub>	3-methoxyphenylethyl	
1222	NHS (O <sub>2</sub> ) CF <sub>3</sub>	H	
1223	NHS (O <sub>2</sub> ) CF <sub>3</sub>	methyl	
1224	NHS (O <sub>2</sub> ) CF <sub>3</sub>	ethyl	
1225	NHS (O <sub>2</sub> ) CF <sub>3</sub>	n-propyl	
1226	NHS (O <sub>2</sub> ) CF <sub>3</sub>	n-butyl	
1227	NHS (O <sub>2</sub> ) CF <sub>3</sub>	n-pentyl	
1228	NHS (O <sub>2</sub> ) CF <sub>3</sub>	n-hexanyl	

1229	NHS (O <sub>2</sub> ) CF <sub>3</sub>	n-heptanyl	
1230	NHS (O <sub>2</sub> ) CF <sub>3</sub>	isopropyl	
1231	NHS (O <sub>2</sub> ) CF <sub>3</sub>	tert-butyl	
1232	NHS (O <sub>2</sub> ) CF <sub>3</sub>	cyclopropyl	
1233	NHS (O <sub>2</sub> ) CF <sub>3</sub>	cyclobutanyl	
1234	NHS (O <sub>2</sub> ) CF <sub>3</sub>	cyclopentanyl	
1235	NHS (O <sub>2</sub> ) CF <sub>3</sub>	cyclohexanyl	
1236	NHS (O <sub>2</sub> ) CF <sub>3</sub>	cycloheptanyl	
1237	NHS (O <sub>2</sub> ) CF <sub>3</sub>	phenyl	
1238	NHS (O <sub>2</sub> ) CF <sub>3</sub>	phenylmethyl	
1239	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-hydroxyphenyl	
1240	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-hydroxy-4-methoxyphenyl	
1241	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-fluorophenyl	
1242	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-chlorophenyl	
1243	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-nitrophenyl	
1244	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminophenyl	
1245	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methyl-sulfonamidephenyl	
1246	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-trifluoro-methylsulfonamidephenyl	
1247	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-Ac-NHphenyl	
1248	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-Boc-NHphenyl	
1249	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-Cbz-NHphenyl	
1250	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminomethylenephenyl	
1251	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminoethylenephenyl	
1252	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-cyanophenyl	
1253	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-cyanomethylphenyl	
1254	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-hydroxymethylenephenyl	
1255	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-carboxylphenyl	
1256	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-mercaptophenyl	
1257	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methoxyphenyl	
1258	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3,4-methylenedioxophenyl	
1259	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-tetrazolephenyl	
1260	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminosulfonylphenyl	
1261	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methylamino-sulfonylphenyl	
1262	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-ethylamino-sulfonylphenyl	
1263	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-tert-butylamino-sulfonylphenyl	
1264	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methylsulfonylphenyl	
1265	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-methoxyphenyl	
1266	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-phenylphenyl	
1267	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-hydroxymethylene-phenyl)-phenyl	
1268	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
1269	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-methylamino-sulfonylphenyl)-phenyl	
1270	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1271	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-aminosulfonylphenyl)-phenyl	
1272	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-chlorophenyl)-phenyl	
1273	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-fluorophenyl)-phenyl	
1274	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2,4-dichlorophenyl)-phenyl	
1275	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2,6-dichlorophenyl)-phenyl	
1276	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3,5-dichlorophenyl)-phenyl	

1277	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2,3-dichlorophenyl)-phenyl	
1278	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-methylphenyl)-phenyl	
1279	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-tetrazole-phenyl)-phenyl	
1280	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-methoxy-phenyl)-phenyl	
1281	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-tmethyl-phenyl)-phenyl	
1282	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-formyl-phenyl)-phenyl	
1283	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-amino-phenyl)-phenyl	
1284	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-methylamino-phenyl)-phenyl	
1285	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-ethylamino-phenyl)-phenyl	
1286	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-propylamino-phenyl)-phenyl	
1287	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-methylsulfonylamino-phenyl)-phenyl	
1288	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
1289	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-methylphenyl)-phenyl	
1290	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-isopropylphenyl)-phenyl	
1291	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
1292	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
1293	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-amino-phenyl)-phenyl	
1294	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-(3-nitro-phenyl)-phenyl	
1295	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-pyridyl	
1296	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-pyridyl	
1297	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-pyridyl	
1298	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-amino-4-pyridyl	
1299	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-hydroxy-4-pyridyl	
1300	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-imidazole	
1301	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-nitro-3-imidazole	
1302	NHS (O <sub>2</sub> ) CF <sub>3</sub>	5-thiazole	
1303	NHS (O <sub>2</sub> ) CF <sub>3</sub>	5-oxazole	
1304	NHS (O <sub>2</sub> ) CF <sub>3</sub>	4-pyazole	
1305	NHS (O <sub>2</sub> ) CF <sub>3</sub>	phenylethyl	
1306	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-aminophenylethyl	
1307	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-methylsulfonylamino-phenylethyl	
1308	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
1309	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-hydroxymethylene-phenylethyl	
1310	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-aminomethylene-phenylethyl	
1311	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-tetrazolephenylethyl	
1312	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-tert-butylamino-sulfonylphenylethyl	
1313	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-aminosulfonyl-phenylethyl	
1314	NHS (O <sub>2</sub> ) CF <sub>3</sub>	2-methoxyphenylethyl	
1315	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminophenylethyl	
1316	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methylsulfonylamino-phenylethyl	
1317	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-trifluoromethylsulfonylamino-phenylethyl	

1318	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-hydroxymethylene-phenylethyl	
1319	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminomethylene-phenylethyl	
1320	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-tetrazolephenylethyl	
1321	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-tertbutylamino-sulfonylphenylethyl	
1322	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-aminosulfonyl-phenylethyl	
1323	NHS (O <sub>2</sub> ) CF <sub>3</sub>	3-methoxyphenylethyl	
1324	4- aminophenylS(O) 2NH	H	
1325	4- aminophenylS(O) 2NH	methyl	
1326	4- aminophenylS(O) 2NH	ethyl	
1327	4- aminophenylS(O) 2NH	n-propyl	
1328	4- aminophenylS(O) 2NH	n-butyl	
1329	4- aminophenylS(O) 2NH	n-pentyl	
1330	4- aminophenylS(O) 2NH	n-hexanyl	
1331	4- aminophenylS(O) 2NH	n-heptanyl	
1332	4- aminophenylS(O) 2NH	isopropyl	
1333	4- aminophenylS(O) 2NH	tert-butyl	
1334	4- aminophenylS(O) 2NH	cyclopropyl	
1335	4- aminophenylS(O) 2NH	cyclobutanyl	
1336	4- aminophenylS(O) 2NH	cyclopentanyl	
1337	4- aminophenylS(O) 2NH	cyclohexanyl	
1338	4- aminophenylS(O) 2NH	cycloheptanyl	
1339	4- aminophenylS(O) 2NH	phenyl	
1340	4- aminophenylS(O) 2NH	phenylmethyl	
1341	4- aminophenylS(O) 2NH	3-hydroxyphenyl	
1342	4- aminophenylS(O) 2NH	3-hydroxy-4-methoxyphenyl	
1343	4- aminophenylS(O) 2NH	3-fluorophenyl	
1344	4- aminophenylS(O) 2NH	3-chlorophenyl	
1345	4- aminophenylS(O) 2NH	3-nitrophenyl	
1346	4- aminophenylS(O) 2NH	3-aminophenyl	
1347	4- aminophenylS(O) 2NH	3-methyl-sulfonamidephenyl	
1348	4- aminophenylS(O) 2NH	3-trifluoro-methylsulfonamidephenyl	
1349	4- aminophenylS(O) 2NH	3-Ac-NHphenyl	
1350	4- aminophenylS(O) 2NH	3-Boc-NHphenyl	
1351	4- aminophenylS(O) 2NH	3-Cbz-NHphenyl	
1352	4- aminophenylS(O) 2NH	3-aminomethylenephenyl	
1353	4- aminophenylS(O) 2NH	3-aminoethylenephenyl	
1354	4- aminophenylS(O) 2NH	3-cyanophenyl	
1355	4- aminophenylS(O) 2NH	3-cyanomethylphenyl	
1356	4- aminophenylS(O) 2NH	3-hydroxymethylenephenyl	
1357	4- aminophenylS(O) 2NH	3-carboxyphenyl	
1358	4- aminophenylS(O) 2NH	3-mercaptophenyl	
1359	4- aminophenylS(O) 2NH	3-methoxyphenyl	
1360	4- aminophenylS(O) 2NH	3,4-methylenedioxyphenyl	
1361	4- aminophenylS(O) 2NH	3-tetrazolephenyl	
1362	4- aminophenylS(O) 2NH	3-aminosulfonylphenyl	
1363	4- aminophenylS(O) 2NH	3-methylamino-sulfonylphenyl	
1364	4- aminophenylS(O) 2NH	3-ethylamino-sulfonylphenyl	
1365	4- aminophenylS(O) 2NH	3-tert-butylamino-sulfonylphenyl	
1366	4- aminophenylS(O) 2NH	3-methylsulfonylphenyl	
1367	4- aminophenylS(O) 2NH	4-methoxyphenyl	
1368	4- aminophenylS(O) 2NH	4-phenylphenyl	
1369	4- aminophenylS(O) 2NH	4-(2-hydroxymethylene-phenyl)-phenyl	
1370	4- aminophenylS(O) 2NH	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
1371	4- aminophenylS(O) 2NH	4-(2-methylamino-sulfonylphenyl)-phenyl	



1372	4- aminophenylS(O)2NH	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1373	4- aminophenylS(O)2NH	4-(2-aminosulfonyl-phenyl)-phenyl	
1374	4- aminophenylS(O)2NH	4-(2-chlorophenyl)-phenyl	
1375	4- aminophenylS(O)2NH	4-(2-fluorophenyl)-phenyl	
1376	4- aminophenylS(O)2NH	4-(2,4-dichlorophenyl)-phenyl	
1377	4- aminophenylS(O)2NH	4-(2,6-dichlorophenyl)-phenyl	
1378	4- aminophenylS(O)2NH	4-(3,5-dichlorophenyl)-phenyl	
1379	4- aminophenylS(O)2NH	4-(2,3-dichlorophenyl)-phenyl	
1380	4- aminophenylS(O)2NH	4-(2-methylphenyl)-phenyl	
1381	4- aminophenylS(O)2NH	4-(2-tetrazole-phenyl)-phenyl	
1382	4- aminophenylS(O)2NH	4-(2-methoxy-phenyl)-phenyl	
1383	4- aminophenylS(O)2NH	4-(2-tmethyl-phenyl)-phenyl	
1384	4- aminophenylS(O)2NH	4-(2-formyl-phenyl)-phenyl	
1385	4- aminophenylS(O)2NH	4-(2-amino-phenyl)-phenyl	
1386	4- aminophenylS(O)2NH	4-(2-methylamino-phenyl)-phenyl	
1387	4- aminophenylS(O)2NH	4-(2-ethylamino-phenyl)-phenyl	
1388	4- aminophenylS(O)2NH	4-(2-propylamino-phenyl)-phenyl	
1389	4- aminophenylS(O)2NH	4-(2-methylsulfonylamino-phenyl)-phenyl	
1390	4- aminophenylS(O)2NH	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
1391	4- aminophenylS(O)2NH	4-(3-methylphenyl)-phenyl	
1392	4- aminophenylS(O)2NH	4-(3-isopropylphenyl)-phenyl	
1393	4- aminophenylS(O)2NH	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
1394	4- aminophenylS(O)2NH	4-(3-methylsulfonylamino-phenyl)-phenyl	
1395	4- aminophenylS(O)2NH	4-(3-amino-phenyl)-phenyl	
1396	4- aminophenylS(O)2NH	4-(3-nitro-phenyl)-phenyl	
1397	4- aminophenylS(O)2NH	2-pyridyl	
1398	4- aminophenylS(O)2NH	3-pyridyl	
1399	4- aminophenylS(O)2NH	4-pyridyl	
1400	4- aminophenylS(O)2NH	3-amino-4-pyridyl	
1401	4- aminophenylS(O)2NH	3-hydroxy-4-pyridyl	
1402	4- aminophenylS(O)2NH	3-imidazole	
1403	4- aminophenylS(O)2NH	2-nitro-3-imidazole	
1404	4- aminophenylS(O)2NH	5-thiazole	
1405	4- aminophenylS(O)2NH	5-oxazole	
1406	4- aminophenylS(O)2NH	4-pyazole	
1407	4- aminophenylS(O)2NH	phenylethyl	
1408	4- aminophenylS(O)2NH	2-aminophenylethyl	
1409	4- aminophenylS(O)2NH	2-methylsulfonylamino-phenylethyl	
1410	4- aminophenylS(O)2NH	2-trifluoromethylsulfonylamino-phenylethyl	
1411	4- aminophenylS(O)2NH	2-hydroxymethylene-phenylethyl	

1412	4- aminophenylS(O) <sub>2</sub> NH	2-aminomethylene-phenylethyl	
1413	4- aminophenylS(O) <sub>2</sub> NH	2-tetrazolephenylethyl	
1414	4- aminophenylS(O) <sub>2</sub> NH	2-tert-butylamino-sulfonylphenylethyl	
1415	4- aminophenylS(O) <sub>2</sub> NH	2-aminosulfonyl-phenylethyl	
1416	4- aminophenylS(O) <sub>2</sub> NH	2-methoxyphenylethyl	
1417	4- aminophenylS(O) <sub>2</sub> NH	3-aminophenylethyl	
1418	4- aminophenylS(O) <sub>2</sub> NH	3-methylsulfonylamino-phenylethyl	
1419	4- aminophenylS(O) <sub>2</sub> NH	3-trifluoromethylsulfonylamino-phenylethyl	
1420	4- aminophenylS(O) <sub>2</sub> NH	3-hydroxymethylene-phenylethyl	
1421	4- aminophenylS(O) <sub>2</sub> NH	3-aminomethylene-phenylethyl	
1422	4- aminophenylS(O) <sub>2</sub> NH	3-tetrazolephenylethyl	
1423	4- aminophenylS(O) <sub>2</sub> NH	3-tert-butylamino-sulfonylphenylethyl	
1424	4- aminophenylS(O) <sub>2</sub> NH	3-aminosulfonyl-phenylethyl	
1425	4- aminophenylS(O) <sub>2</sub> NH	3-methoxyphenylethyl	
1426	NH(CO)NMe <sub>2</sub>	H	
1427	NH(CO)NMe <sub>2</sub>	methyl	
1428	NH(CO)NMe <sub>2</sub>	ethyl	
1429	NH(CO)NMe <sub>2</sub>	n-propyl	
1430	NH(CO)NMe <sub>2</sub>	n-butyl	
1431	NH(CO)NMe <sub>2</sub>	n-pentyl	
1432	NH(CO)NMe <sub>2</sub>	n-hexanyl	
1433	NH(CO)NMe <sub>2</sub>	n-heptanyl	
1434	NH(CO)NMe <sub>2</sub>	isopropyl	
1435	NH(CO)NMe <sub>2</sub>	tert-butyl	
1436	NH(CO)NMe <sub>2</sub>	cyclopropyl	
1437	NH(CO)NMe <sub>2</sub>	cyclobutanyl	
1438	NH(CO)NMe <sub>2</sub>	cyclopentanyl	
1439	NH(CO)NMe <sub>2</sub>	cyclohexanyl	
1440	NH(CO)NMe <sub>2</sub>	cycloheptanyl	
1441	NH(CO)NMe <sub>2</sub>	phenyl	
1442	NH(CO)NMe <sub>2</sub>	phenylmethyl	
1443	NH(CO)NMe <sub>2</sub>	3-hydroxyphenyl	
1444	NH(CO)NMe <sub>2</sub>	3-hydroxy-4-methoxyphenyl	
1445	NH(CO)NMe <sub>2</sub>	3-fluorophenyl	
1446	NH(CO)NMe <sub>2</sub>	3-chlorophenyl	
1447	NH(CO)NMe <sub>2</sub>	3-nitrophenyl	
1448	NH(CO)NMe <sub>2</sub>	3-aminophenyl	
1449	NH(CO)NMe <sub>2</sub>	3-methylsulfonylamidephenyl	
1450	NH(CO)NMe <sub>2</sub>	3-trifluoro-methyl-sulfonylamidephenyl	
1451	NH(CO)NMe <sub>2</sub>	3-Ac-NHphenyl	
1452	NH(CO)NMe <sub>2</sub>	3-Boc-NHphenyl	
1453	NH(CO)NMe <sub>2</sub>	3-Cbz-NHphenyl	
1454	NH(CO)NMe <sub>2</sub>	3-aminomethylenepheryl	
1455	NH(CO)NMe <sub>2</sub>	3-aminoethylenepheryl	
1456	NH(CO)NMe <sub>2</sub>	3-cyanophenyl	
1457	NH(CO)NMe <sub>2</sub>	3-cyanomethylphenyl	
1458	NH(CO)NMe <sub>2</sub>	3-hydroxy-methylenepheryl	
1459	NH(CO)NMe <sub>2</sub>	3-carboxylphenyl	
1460	NH(CO)NMe <sub>2</sub>	3-mercaptophenyl	
1461	NH(CO)NMe <sub>2</sub>	3-methoxyphenyl	

1462	NH (CO) NMe <sub>2</sub>	3,4-methylenedioxyphenyl	
1463	NH (CO) NMe <sub>2</sub>	3-tetrazolephenyl	
1464	NH (CO) NMe <sub>2</sub>	3-aminosulfonylphenyl	
1465	NH (CO) NMe <sub>2</sub>	3-methylamino-sulfonylphenyl	
1466	NH (CO) NMe <sub>2</sub>	3-ethylamino-sulfonylphenyl	
1467	NH (CO) NMe <sub>2</sub>	3-tert-butylamino-sulfonylphenyl	
1468	NH (CO) NMe <sub>2</sub>	3-methylsulfonylphenyl	
1469	NH (CO) NMe <sub>2</sub>	4-methoxyphenyl	
1470	NH (CO) NMe <sub>2</sub>	4-phenylphenyl	
1471	NH (CO) NMe <sub>2</sub>	4-(2-hydroxymethylene-phenyl)-phenyl	
1472	NH (CO) NMe <sub>2</sub>	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
1473	NH (CO) NMe <sub>2</sub>	4-(2-methylamino-sulfonylphenyl)-phenyl	
1474	NH (CO) NMe <sub>2</sub>	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1475	NH (CO) NMe <sub>2</sub>	4-(2-aminosulfonylphenyl)-phenyl	
1476	NH (CO) NMe <sub>2</sub>	4-(2-chlorophenyl)-phenyl	
1477	NH (CO) NMe <sub>2</sub>	4-(2-fluorophenyl)-phenyl	
1478	NH (CO) NMe <sub>2</sub>	4-(2,4-dichlorophenyl)-phenyl	
1479	NH (CO) NMe <sub>2</sub>	4-(2,6-dichlorophenyl)-phenyl	
1480	NH (CO) NMe <sub>2</sub>	4-(3,5-dichlorophenyl)-phenyl	
1481	NH (CO) NMe <sub>2</sub>	4-(2,3-dichlorophenyl)-phenyl	
1482	NH (CO) NMe <sub>2</sub>	4-(2-methylphenyl)-phenyl	
1483	NH (CO) NMe <sub>2</sub>	4-(2-tetrazole-phenyl)-phenyl	
1484	NH (CO) NMe <sub>2</sub>	4-(2-methoxy-phenyl)-phenyl	
1485	NH (CO) NMe <sub>2</sub>	4-(2-tmethyl-phenyl)-phenyl	
1486	NH (CO) NMe <sub>2</sub>	4-(2-formyl-phenyl)-phenyl	
1487	NH (CO) NMe <sub>2</sub>	4-(2-amino-phenyl)-phenyl	
1488	NH (CO) NMe <sub>2</sub>	4-(2-methylamino-phenyl)-phenyl	
1489	NH (CO) NMe <sub>2</sub>	4-(2-ethylamino-phenyl)-phenyl	
1490	NH (CO) NMe <sub>2</sub>	4-(2-propylamino-phenyl)-phenyl	
1491	NH (CO) NMe <sub>2</sub>	4-(2-methylsulfonylamino-phenyl)-phenyl	
1492	NH (CO) NMe <sub>2</sub>	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
1493	NH (CO) NMe <sub>2</sub>	4-(3-methylphenyl)-phenyl	
1494	NH (CO) NMe <sub>2</sub>	4-(3-isopropylphenyl)-phenyl	
1495	NH (CO) NMe <sub>2</sub>	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
1496	NH (CO) NMe <sub>2</sub>	4-(3-methylsulfonylamino-phenyl)-phenyl	
1497	NH (CO) NMe <sub>2</sub>	4-(3-amino-phenyl)-phenyl	
1498	NH (CO) NMe <sub>2</sub>	4-(3-nitro-phenyl)-phenyl	
1499	NH (CO) NMe <sub>2</sub>	2-pyridyl	
1500	NH (CO) NMe <sub>2</sub>	3-pyridyl	
1501	NH (CO) NMe <sub>2</sub>	4-pyridyl	

1502	NH (CO) NMe <sub>2</sub>	3-amino-4-pyridyl	
1503	NH (CO) NMe <sub>2</sub>	3-hydroxy-4-pyridyl	
1504	NH (CO) NMe <sub>2</sub>	3-imidazole	
1505	NH (CO) NMe <sub>2</sub>	2-nitro-3-imidazole	
1506	NH (CO) NMe <sub>2</sub>	5-thiazole	
1507	NH (CO) NMe <sub>2</sub>	5-oxazole	
1508	NH (CO) NMe <sub>2</sub>	4-pyazole	
1509	NH (CO) NMe <sub>2</sub>	phenylethyl	
1510	NH (CO) NMe <sub>2</sub>	2-aminophenylethyl	
1511	NH (CO) NMe <sub>2</sub>	2-methylsulfonylamino-phenylethyl	
1512	NH (CO) NMe <sub>2</sub>	2-trifluoromethylsulfonylamino-phenylethyl	
1513	NH (CO) NMe <sub>2</sub>	2-hydroxymethylene-phenylethyl	
1514	NH (CO) NMe <sub>2</sub>	2-aminomethylene-phenylethyl	
1515	NH (CO) NMe <sub>2</sub>	2-tetrazolephenylethyl	
1516	NH (CO) NMe <sub>2</sub>	2-tert-butylamino-sulfonylphenylethyl	
1517	NH (CO) NMe <sub>2</sub>	2-aminosulfonyl-phenylethyl	
1518	NH (CO) NMe <sub>2</sub>	2-methoxyphenylethyl	
1519	NH (CO) NMe <sub>2</sub>	3-aminophenylethyl	
1520	NH (CO) NMe <sub>2</sub>	3-methylsulfonylamino-phenylethyl	
1521	NH (CO) NMe <sub>2</sub>	3-trifluoromethylsulfonylamino-phenylethyl	
1522	NH (CO) NMe <sub>2</sub>	3-hydroxymethylene-phenylethyl	
1523	NH (CO) NMe <sub>2</sub>	3-aminomethylene-phenylethyl	
1524	NH (CO) NMe <sub>2</sub>	3-tetrazolephenylethyl	
1525	NH (CO) NMe <sub>2</sub>	3-tertbutylamino-sulfonylphenylethyl	
1526	NH (CO) NMe <sub>2</sub>	3-aminosulfonyl-phenylethyl	
1527	NH (CO) NMe <sub>2</sub>	3-methoxyphenylethyl	
1528	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	H	
1529	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	methyl	
1530	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	ethyl	
1531	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	n-propyl	
1532	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	n-butyl	
1533	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	n-pentyl	
1534	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	n-hexanyl	
1535	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	n-heptanyl	
1536	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	isopropyl	
1537	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	tert-butyl	
1538	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	cyclopropyl	
1539	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	cyclobutanyl	
1540	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	cyclopentanyl	
1541	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	cyclohexanyl	
1542	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	cycloheptanyl	
1543	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	phenyl	
1544	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	phenylmethyl	
1545	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-hydroxyphenyl	
1546	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-hydroxy-4-methoxyphenyl	
1547	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-fluorophenyl	
1548	NH (CO) N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-chlorophenyl	

1549	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-nitrophenyl	
1550	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminophenyl	
1551	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-methyl-sulfonamidephenyl	
1552	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-trifluoro-methylsulfonamidephenyl	
1553	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-Ac-NHphenyl	
1554	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-Boc-NHphenyl	
1555	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-Cbz-NHphenyl	
1556	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminomethylenephphenyl	
1557	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminoethylenephphenyl	
1558	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-cyanophenyl	
1559	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-cyanomethylphenyl	
1560	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-hydroxy-methylenephphenyl	
1561	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-carboxylphenyl	
1562	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-mercaptophenyl	
1563	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-methoxyphenyl	
1564	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3,4-methylenedioxyphenyl	
1565	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-tetrazolephenyl	
1566	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminosulfonylphenyl	
1567	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-methylamino-sulfonylphenyl	
1568	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-ethylamino-sulfonylphenyl	
1569	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-tertbutylamino-sulfonylphenyl	
1570	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-methylsulfonylphenyl	
1571	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-methoxyphenyl	
1572	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-phenylphenyl	
1573	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-hydroxymethylene-phenyl)-phenyl	
1574	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
1575	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-methylamino-sulfonylphenyl)-phenyl	
1576	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1577	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-aminosulfonyl-phenyl)-phenyl	
1578	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-chlorophenyl)-phenyl	
1579	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-fluorophenyl)-phenyl	
1580	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2,4-dichlorophenyl)-phenyl	
1581	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2,6-dichlorophenyl)-phenyl	
1582	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3,5-dichlorophenyl)-phenyl	
1583	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2,3-dichlorophenyl)-phenyl	
1584	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-methylphenyl)-phenyl	
1585	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-tetrazole-phenyl)-phenyl	
1586	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-methoxy-phenyl)-phenyl	
1587	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-tmethyl-phenyl)-phenyl	
1588	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-formyl-phenyl)-phenyl	
1589	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-amino-phenyl)-phenyl	
1590	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-methylamino-phenyl)-phenyl	
1591	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-ethylamino-phenyl)-phenyl	
1592	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-propylamino-phenyl)-phenyl	

1593	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-methylsulfonylamino-phenyl)-phenyl	
1594	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
1595	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-methylphenyl)-phenyl	
1596	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-isopropylphenyl)-phenyl	
1597	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
1598	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-methylsulfonylamino-phenyl)-phenyl	
1599	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-amino-phenyl)-phenyl	
1600	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-(3-nitro-phenyl)-phenyl	
1601	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-pyridyl	
1602	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-pyridyl	
1603	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-pyridyl	
1604	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-amino-4-pyridyl	
1605	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-hydroxy-4-pyridyl	
1606	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-imidazole	
1607	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-nitro-3-imidazole	
1608	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	5-thiazole	
1609	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	5-oxazole	
1610	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	4-pyazole	
1611	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	phenylethyl	
1612	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-aminophenylethyl	
1613	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-methylsulfonylamino-phenylethyl	
1614	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-trifluoromethylsulfonylamino-phenylethyl	
1615	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-hydroxymethylene-phenylethyl	
1616	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-aminomethylene-phenylethyl	
1617	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-tetrazolephenylethyl	
1618	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-tert-butylamino-sulfonylphenylethyl	
1619	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-aminosulfonyl-phenylethyl	
1620	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	2-methoxyphenylethyl	
1621	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminophenylethyl	
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1623	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-trifluoromethylsulfonylamino-phenylethyl	
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1626	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-tetrazolephenylethyl	
1627	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-tertbutylamino-sulfonylphenylethyl	
1628	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-aminosulfonyl-phenylethyl	
1629	NH(CO)N(CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	3-methoxyphenylethyl	
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1635	tert-BuCONH	n-pentyl	

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1637	tert-BuCONH	n-heptanyl	
1638	tert-BuCONH	isopropyl	
1639	tert-BuCONH	tert-butyl	
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1641	tert-BuCONH	cyclobutanyl	
1642	tert-BuCONH	cyclopentanyl	
1643	tert-BuCONH	cyclohexanyl	
1644	tert-BuCONH	cycloheptanyl	
1645	tert-BuCONH	phenyl	
1646	tert-BuCONH	phenylmethyl	
1647	tert-BuCONH	3-hydroxyphenyl	
1648	tert-BuCONH	3-hydroxy-4-methoxyphenyl	
1649	tert-BuCONH	3-fluorophenyl	
1650	tert-BuCONH	3-chlorophenyl	
1651	tert-BuCONH	3-nitrophenyl	
1652	tert-BuCONH	3-aminophenyl	
1653	tert-BuCONH	3-methyl-sulfonamidophenyl	
1654	tert-BuCONH	3-trifluoro-methylsulfonamidophenyl	
1655	tert-BuCONH	3-Ac-NHphenyl	
1656	tert-BuCONH	3-Boc-NHphenyl	
1657	tert-BuCONH	3-Cbz-NHphenyl	
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1660	tert-BuCONH	3-cyanophenyl	
1661	tert-BuCONH	3-cyanomethylphenyl	
1662	tert-BuCONH	3-hydroxy-methylenepheryl	
1663	tert-BuCONH	3-carboxylphenyl	
1664	tert-BuCONH	3-mercaptophenyl	
1665	tert-BuCONH	3-methoxyphenyl	
1666	tert-BuCONH	3,4-methylenedioxyphenyl	
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1668	tert-BuCONH	3-aminosulfonylphenyl	
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1681	tert-BuCONH	4-(2-fluorophenyl)-phenyl	
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1719	tert-BuCONH	2-tetrazolephenylethyl	
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1722	tert-BuCONH	2-methoxyphenylethyl	
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1728	tert-BuCONH	3-tetrazolephenylethyl	



1729	tert-BuCONH	3-tert-butylamino-sulfonylphenylethyl	
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1750	c-C <sub>3</sub> H <sub>5</sub> CONH	3-hydroxy-4-methoxyphenyl	
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1754	c-C <sub>3</sub> H <sub>5</sub> CONH	3-aminophenyl	
1755	c-C <sub>3</sub> H <sub>5</sub> CONH	3-methyl-sulfonamidephenyl	
1756	c-C <sub>3</sub> H <sub>5</sub> CONH	3-trifluoro-methylsulfonamidephenyl	
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1769	c-C <sub>3</sub> H <sub>5</sub> CONH	3-tetrazolephenyl	
1770	c-C <sub>3</sub> H <sub>5</sub> CONH	3-aminosulfonylphenyl	
1771	c-C <sub>3</sub> H <sub>5</sub> CONH	3-methylamino-sulfonylphenyl	
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1777	c-C <sub>3</sub> H <sub>5</sub> CONH	4-(2-hydroxymethylene-phenyl)-phenyl	
1778	c-C <sub>3</sub> H <sub>5</sub> CONH	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
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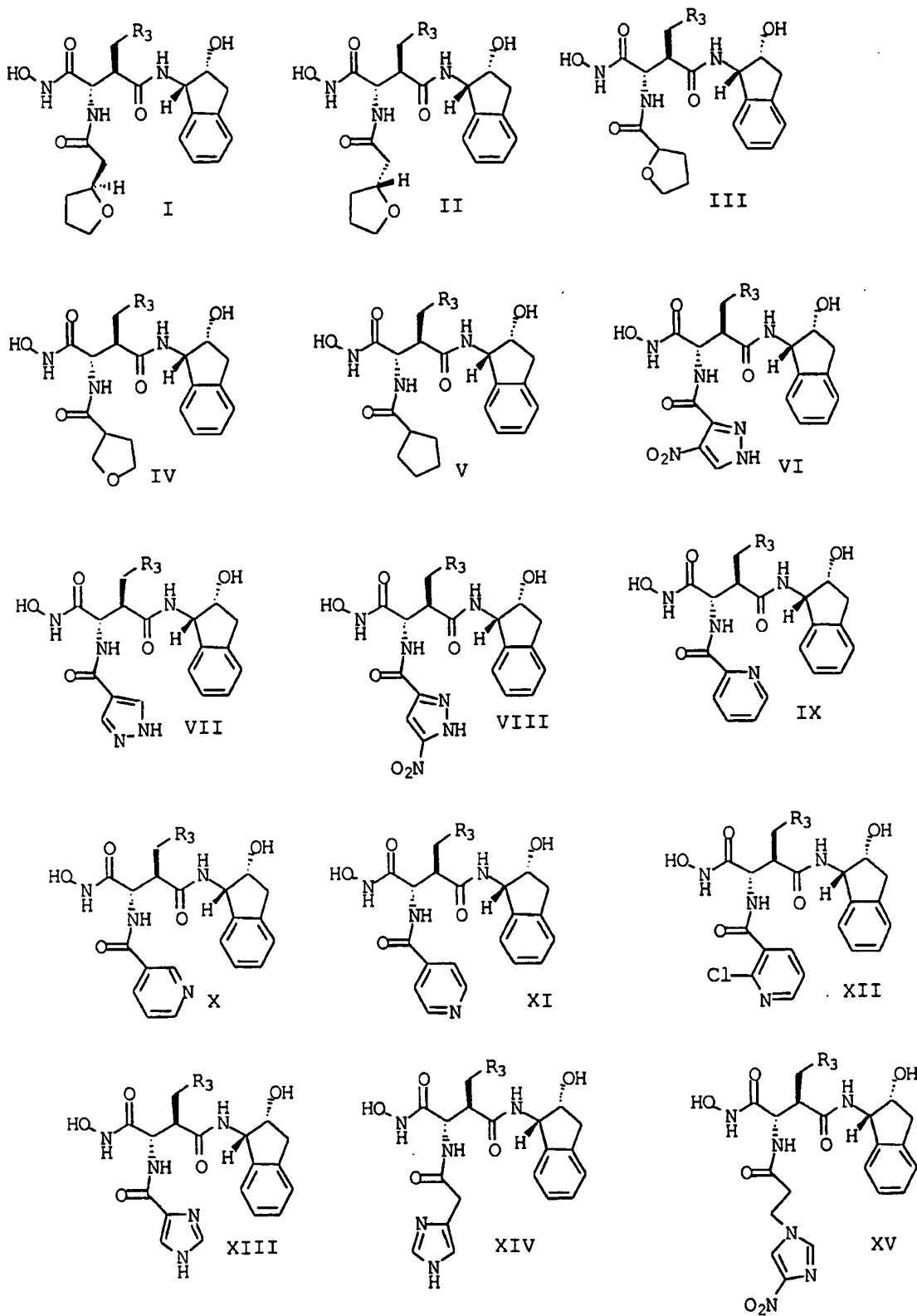
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1791	c-C <sub>3</sub> H <sub>5</sub> CONH	4-(2-tmethyl-phenyl)-phenyl	
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1798	c-C <sub>3</sub> H <sub>5</sub> CONH	4-(2-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
1799	c-C <sub>3</sub> H <sub>5</sub> CONH	4-(3-methylphenyl)-phenyl	
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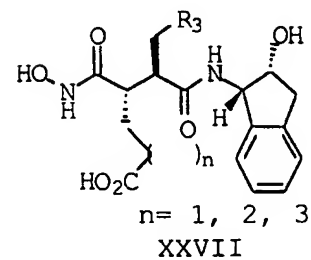
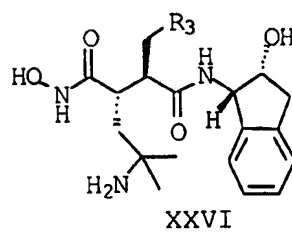
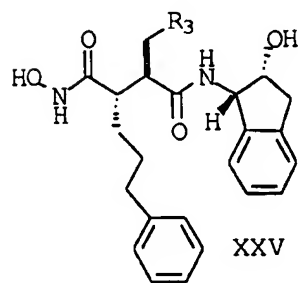
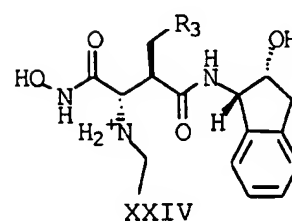
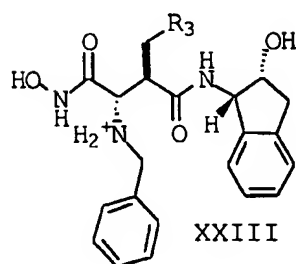
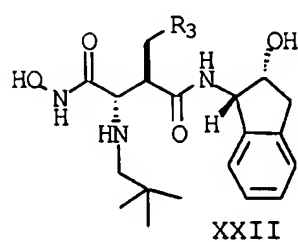
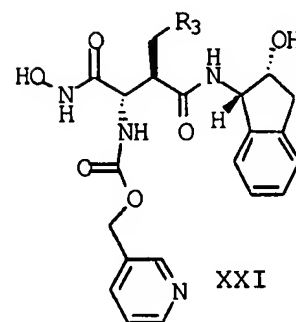
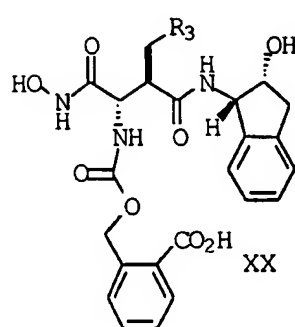
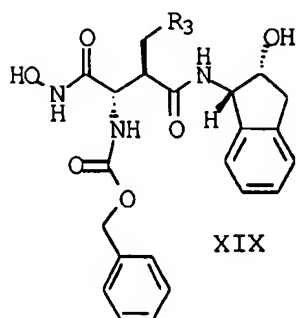
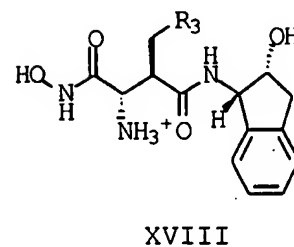
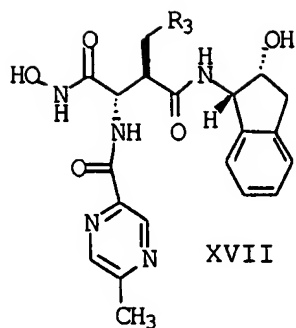
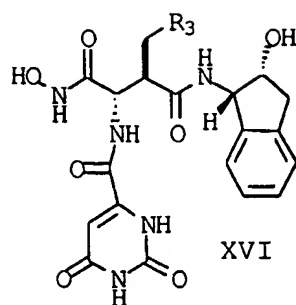
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1822	c-C <sub>3</sub> H <sub>5</sub> CONH	2-tert-butylamino-sulfonylphenylethyl	
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1824	c-C <sub>3</sub> H <sub>5</sub> CONH	2-methoxyphenylethyl	
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1826	c-C <sub>3</sub> H <sub>5</sub> CONH	3-methylsulfonylamino-phenylethyl	
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1828	c-C <sub>3</sub> H <sub>5</sub> CONH	3-hydroxymethylene-phenylethyl	
1829	c-C <sub>3</sub> H <sub>5</sub> CONH	3-aminomethylene-phenylethyl	
1830	c-C <sub>3</sub> H <sub>5</sub> CONH	3-tetrazolephenylethyl	
1831	c-C <sub>3</sub> H <sub>5</sub> CONH	3-tert-butylamino-sulfonylphenylethyl	
1832	c-C <sub>3</sub> H <sub>5</sub> CONH	3-aminosulfonyl-phenylethyl	
1833	c-C <sub>3</sub> H <sub>5</sub> CONH	3-methoxyphenylethyl	
1834			
1835	2x	H	
1836	"	methyl	
1837	"	ethyl	
1838	"	n-propyl	
1839	"	n-butyl	
1840	"	n-pentyl	
1841	"	n-hexanyl	
1842	"	n-heptanyl	
1843	"	isopropyl	
1844	"	tert-butyl	
1845	"	cyclopropyl	
1846	"	cyclobutanyl	
1847	"	cyclopentanyl	
1848	"	cyclohexanyl	
1849	"	cycloheptanyl	
1850	"	phenyl	
1851	"	phenylmethyl	
1852	"	3-hydroxyphenyl	
1853	"	3-hydroxy-4-methoxyphenyl	
1854	"	3-fluorophenyl	
1855	"	3-chlorophenyl	
1856	"	3-nitrophenyl	
1857	"	3-aminophenyl	
1858	"	3-methyl-sulfonamidephenyl	
1859	"	3-trifluoro-methylsulfonamidephenyl	
1860	"	3-Ac-NHphenyl	
1861	"	3-Boc-NHphenyl	
1862	"	3-Cbz-NHphenyl	
1863	"	3-aminomethylenepheryl	
1864	"	3-aminoethylenepheryl	
1865	"	3-cyanophenyl	
1866	"	3-cyanomethylphenyl	
1867	"	3-hydroxy-methylenepheryl	
1868	"	3-carboxylphenyl	
1869	"	3-mercaptophenyl	
1870	"	3-methoxyphenyl	
1871	"	3,4-methylenedioxophenyl	
1872	"	3-tetrazolephenyl	
1873	"	3-aminosulfonylphenyl	

1874	"	3-methylamino-sulfonylphenyl	
1875	"	3-ethylamino-sulfonylphenyl	
1876	"	3-tert-butylamino-sulfonylphenyl	
1877	"	3-methylsulfonylphenyl	
1878	"	4-methoxyphenyl	
1879	"	4-phenylphenyl	
1880	"	4-(2-hydroxymethylene-phenyl)-phenyl	
1881	"	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
1882	"	4-(2-methylamino-sulfonylphenyl)-phenyl	
1883	"	4-(2-ethylamino-sulfonylphenyl)-phenyl	
1884	"	4-(2-aminosulfonyl-phenyl)-phenyl	
1885	"	4-(2-chlorophenyl)-phenyl	
1886	"	4-(2-fluorophenyl)-phenyl	
1887	"	4-(2,4-dichlorophenyl)-phenyl	
1888	"	4-(2,6-dichlorophenyl)-phenyl	
1889	"	4-(3,5-dichlorophenyl)-phenyl	
1890	"	4-(2,3-dichlorophenyl)-phenyl	
1891	"	4-(2-methylphenyl)-phenyl	
1892	"	4-(2-tetrazole-phenyl)-phenyl	
1893	"	4-(2-methoxy-phenyl)-phenyl	
1894	"	4-(2-methyl-phenyl)-phenyl	
1895	"	4-(2-formyl-phenyl)-phenyl	
1896	"	4-(2-amino-phenyl)-phenyl	
1897	"	4-(2-methylamino-phenyl)-phenyl	
1898	"	4-(2-ethylamino-phenyl)-phenyl	
1899	"	4-(2-propylamino-phenyl)-phenyl	
1900	"	4-(2-methylsulfonyl-amino-phenyl)-phenyl	
1901	"	4-(2-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
1902	"	4-(3-methylphenyl)-phenyl	
1903	"	4-(3-isopropylphenyl)-phenyl	
1904	"	4-(3-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
1905	"	4-(3-methylsulfonyl-amino-phenyl)-phenyl	
1906	"	4-(3-amino-phenyl)-phenyl	
1907	"	4-(3-nitro-phenyl)-phenyl	
1908	"	2-pyridyl	
1909	"	3-pyridyl	
1910	"	4-pyridyl	
1911	"	3-amino-4-pyridyl	
1912	"	3-hydroxy-4-pyridyl	
1913	"	3-imidazole	
1914	"	2-nitro-3-imidazole	
1915	"	5-thiazole	
1916	"	5-oxazole	

1917	"	4-tetrazole	
1918	"	phenylethyl	
1919	"	2-aminophenylethyl	
1920	"	2-methylsulfonylamino-phenylethyl	
1921	"	2-trifluoromethylsulfonylamino-phenylethyl	
1922	"	2-hydroxymethylene-phenylethyl	
1923	"	2-aminomethylene-phenylethyl	
1924	"	2-tetrazolephenylethyl	
1925	"	2-tert-butylamino-sulfonylphenylethyl	
1926	"	2-aminosulfonyl-phenylethyl	
1927	"	2-methoxyphenylethyl	
1928	"	3-aminophenylethyl	
1929	"	3-methylsulfonylamino-phenylethyl	
1930	"	3-trifluoromethylsulfonylamino-phenylethyl	
1931	"	3-hydroxymethylene-phenylethyl	
1932	"	3-aminomethylene-phenylethyl	
1933	"	3-tetrazolephenylethyl	
1934	"	3-tertbutylamino-sulfonylphenylethyl	
1935	"	3-aminosulfonyl-phenylethyl	
1936	"	3-methoxyphenylethyl	

Table 3



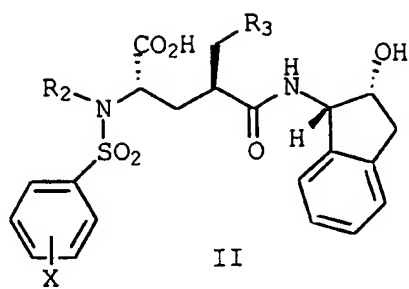
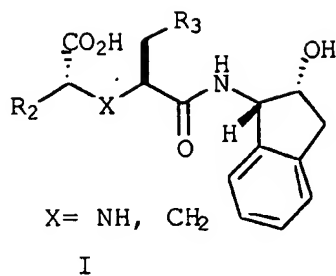


Ex#	R3	Ms	Ex#	R3	Ms
2000	H		2001	4-(2-aminosulfonylphenyl)-phenyl	
2002	methyl		2003	4-(2-chlorophenyl)-phenyl	
2004	ethyl		2005	4-(2-fluorophenyl)-phenyl	
2006	n-propyl		2007	4-(2,4-dichlorophenyl)-phenyl	
2008	n-butyl		2009	4-(2,6-dichlorophenyl)-phenyl	
2010	n-pentyl		2011	4-(3,5-dichlorophenyl)-phenyl	
2012	n-hexanyl		2013	4-(2,3-dichlorophenyl)-phenyl	
2014	n-heptanyl		2015	4-(2-methylphenyl)-phenyl	
2016	isopropyl		2017	4-(2-tetrazole-phenyl)-phenyl	
2018	tert-butyl		2019	4-(2-methoxy-phenyl)-phenyl	
2020	cyclopropyl		2021	4-(2-tmethyl-phenyl)-phenyl	
2022	cyclobutanyl		2023	4-(2-formyl-phenyl)-phenyl	
2024	cyclopentanyl		2025	4-(2-amino-phenyl)-phenyl	
2026	cyclohexanyl		2027	4-(2-methylamino-phenyl)-phenyl	
2028	cycloheptanyl		2029	4-(2-ethylamino-phenyl)-phenyl	
2030	phenyl		2031	4-(2-propylamino-phenyl)-phenyl	
2032	phenylmethyl		2033	4-(2-methylsulfonylamino-phenyl)-phenyl	
2034	3-hydroxyphenyl		2035	4-(2-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
2036	3-hydroxy-4-methoxyphenyl		2037	4-(3-methylphenyl)-phenyl	
2038	3-fluorophenyl		2039	4-(3-isopropylphenyl)-phenyl	
2040	3-chlorophenyl		2041	4-(3-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
2042	3-nitrophenyl		2043	4-(3-methylsulfonylamino-phenyl)-phenyl	
2044	3-aminophenyl		2045	4-(3-amino-phenyl)-phenyl	
2046	3-methylsulfonylamidephenyl		2047	4-(3-nitro-phenyl)-phenyl	
2048	3-trifluoro-methyl-sulfonylamidephenyl		2049	2-pyridyl	
2050	3-Ac-NHphenyl		2051	3-pyridyl	
2052	3-Boc-NHphenyl		2053	4-pyridyl	
2054	3-Cbz-NHphenyl		2055	3-amino-4-pyridyl	

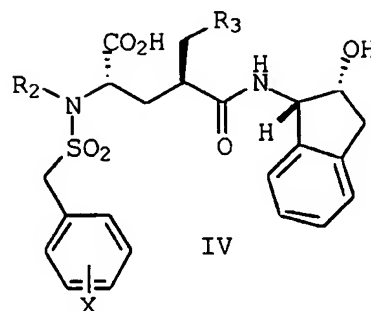
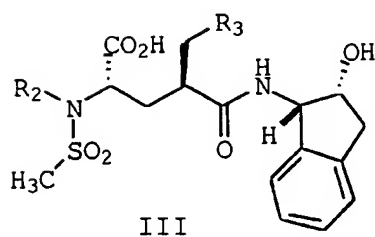
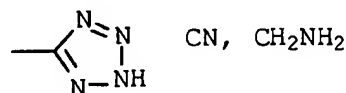


2056	3-aminomethylene-phenyl		2057	3-hydroxy-4-pyridyl	
2058	3-amino-ethylenepheryl		2059	3-imidazole	
2060	3-cyanophenyl		2061	2-nitro-3-imidazole	
2062	3-cyanomethylphenyl		2063	5-thiazole	
2064	3-hydroxy-methylenepheryl		2065	5-oxazole	
2066	3-carboxylphenyl		2067	4-pyazole	
2068	3-mercaptophenyl		2069	phenylethyl	
2070	3-methoxyphenyl		2071	2-aminophenylethyl	
2072	3,4-methylenedioxy-phenyl		2073	2-methylsulfonyl-amino-phenylethyl	
2074	3-tetrazolephenyl		2075	2-trifluoromethylsulfonylamino-phenylethyl	
2076	3-aminosulfonylphenyl		2077	2-hydroxymethylene-phenylethyl	
2078	3-methylamino-sulfonylphenyl		2079	2-aminomethylene-phenylethyl	
2080	3-ethylamino-sulfonylphenyl		2081	2-tetrazole-phenylethyl	
2082	3-tert-butylamino-sulfonylphenyl		2083	2-tertbutylamino-sulfonylphenylethyl	
2084	3-methylsulfonyl-phenyl		2085	2-aminosulfonyl-phenylethyl	
2086	4-methoxyphenyl		2087	2-methoxy-phenylethyl	
2088	4-phenylphenyl		2089	3-aminophenylethyl	
2090	4-(2-hydroxymethylene-phenyl)-phenyl		2091	3-methylsulfonyl-amino-phenylethyl	
2092	4-(2-tert-butylaminosulfonylphenyl)-phenyl		2093	3-trifluoromethylsulfonylamino-phenylethyl	
2094	4-(2-methylamino-sulfonylphenyl)-phenyl		2095	3-hydroxymethylene-phenylethyl	
2096	4-(2-ethylamino-sulfonylphenyl)-phenyl		2097	3-aminomethylene-phenylethyl	
2098			2099	3-tetrazole-phenylethyl	
2100			2101	3-tert-butylamino-sulfonylphenylethyl	
2102			2103	3-aminosulfonyl-phenylethyl	
2104			2105	3-methoxy-phenylethyl	

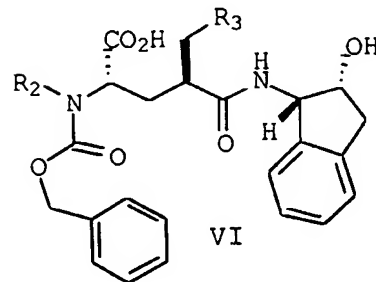
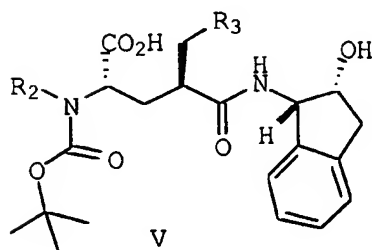
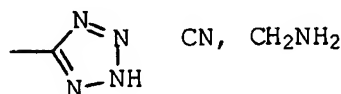
Table 4



X = H, NH<sub>2</sub>, CO<sub>2</sub>H, CH<sub>2</sub>CO<sub>2</sub>H, Cl, F,



X = H, NH<sub>2</sub>, CO<sub>2</sub>H, CH<sub>2</sub>CO<sub>2</sub>H, Cl, F,



Ex#	R2	R3	
2500	n-Bu	H	
2501	"	methyl	
2502	"	ethyl	
2503	"	n-propyl	
2504	"	n-butyl	
2505	"	n-pentyl	
2506	"	n-hexanyl	
2507	"	n-heptanyl	
2508	"	isopropyl	
2509	"	tert-butyl	
2510	"	cyclopropyl	
2511	"	cyclobutanyl	
2512	"	cyclopentanyl	

2513	"	cyclohexanyl	
2514	"	cycloheptanyl	
2515	"	phenyl	
2516	"	phenylmethyl	
2517	"	3-hydroxyphenyl	
2518	"	3-hydroxy-4-methoxyphenyl	
2519	"	3-fluorophenyl	
2520	"	3-chlorophenyl	
2521	"	3-nitrophenyl	
2522	"	3-aminophenyl	
2523	"	3-methyl-sulfonamidephenyl	
2524	"	3-trifluoro-methyl-sulfonamidephenyl	
2525	"	3-Ac-NHphenyl	
2526	"	3-Boc-NHphenyl	
2527	"	3-Cbz-NHphenyl	
2528	"	3-aminomethylenephenyl	
2529	"	3-aminoethylenephenyl	
2530	"	3-cyanophenyl	
2531	"	3-cyanomethylphenyl	
2532	"	3-hydroxy-methylenephenyl	
2533	"	3-carboxylphenyl	
2534	"	3-mercaptophenyl	
2535	"	3-methoxyphenyl	
2536	"	3,4-methylene-dioxophenyl	
2537	"	3-tetrazolephenyl	
2538	"	3-aminosulfonylphenyl	
2539	"	3-methylamino-sulfonylphenyl	
2540	"	3-ethylamino-sulfonylphenyl	
2541	"	3-tertbutylamino-sulfonylphenyl	
2542	"	3-methylsulfonylphenyl	
2543	"	4-methoxyphenyl	
2544	"	4-phenylphenyl	
2545	"	4-(2-hydroxymethylene-phenyl)-phenyl	
2546	"	4-(2-tertbutylamino-sulfonylphenyl)-phenyl	
2547	"	4-(2-methylamino-sulfonylphenyl)-phenyl	
2548	"	4-(2-ethylamino-sulfonylphenyl)-phenyl	
2549	"	4-(2-aminosulfonyl-phenyl)-phenyl	
2550	"	4-(2-chlorophenyl)-phenyl	
2551	"	4-(2-fluorophenyl)-phenyl	
2552	"	4-(2,4-dichlorophenyl)-phenyl	
2553	"	4-(2,6-dichlorophenyl)-phenyl	
2554	"	4-(3,5-dichlorophenyl)-phenyl	
2555	"	4-(2,3-dichlorophenyl)-phenyl	
2556	"	4-(2-methylphenyl)-phenyl	
2557	"	4-(2-tetrazole-phenyl)-phenyl	
2558	"	4-(2-methoxy-phenyl)-phenyl	
2559	"	4-(2-tmethyl-phenyl)-phenyl	
2560	"	4-(2-formyl-phenyl)-phenyl	
2561	"	4-(2-amino-phenyl)-phenyl	

2562	"	4-(2-methylamino-phenyl)-phenyl	
2563	"	4-(2-ethylamino-phenyl)-phenyl	
2564	"	4-(2-propylamino-phenyl)-phenyl	
2565	"	4-(2-methylsulfonylamino-phenyl)-phenyl	
2566	"	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
2567	"	4-(3-methylphenyl)-phenyl	
2568	"	4-(3-isopropylphenyl)-phenyl	
2569	"	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
2570	"	4-(3-methylsulfonylamino-phenyl)-phenyl	
2571	"	4-(3-amino-phenyl)-phenyl	
2572	"	4-(3-nitro-phenyl)-phenyl	
2573	"	2-pyridyl	
2574	"	3-pyridyl	
2575	"	4-pyridyl	
2576	"	3-amino-4-pyridyl	
2577	"	3-hydroxy-4-pyridyl	
2578	"	3-imidazole	
2579	"	2-nitro-3-imidazole	
2580	"	5-thiazole	
2581	"	5-oxazole	
2582	"	4-pyazole	
2583	"	phenylethyl	
2584	"	2-aminophenylethyl	
2585	"	2-methylsulfonylamino-phenylethyl	
2586	"	2-trifluoromethyl-sulfonylamino-phenylethyl	
2587	"	2-hydroxy-methylenepheneylethyl	
2588	"	2-aminomethylene-phenylethyl	
2589	"	2-tetrazolephenylethyl	
2590	"	2-tertbutylamino-sulfonylphenylethyl	
2591	"	2-aminosulfonyl-phenylethyl	
2592	"	2-methoxyphenylethyl	
2593	"	3-aminophenylethyl	
2594	"	3-methylsulfonylamino-phenylethyl	
2595	"	3-trifluoromethyl-sulfonylamino-phenylethyl	
2596	"	3-hydroxymethylene-phenylethyl	
2597	"	3-aminomethylene-phenylethyl	
2598	"	3-tetrazolephenylethyl	
2599	"	3-tertbutylamino-sulfonylphenylethyl	
2600	"	3-aminosulfonyl-phenylethyl	
2601	"	3-methoxyphenylethyl	
2602	"	4-phenylphenylmethyl	

2603	"	4-(2-hydroxymethylenepheryl)-phenylmethyl	
2604	"	4-(2-tert-butyl-aminosulfonyl-phenyl)-phenylmethyl	
2605	"	4-(2-methylamino-sulfonylphenyl)-phenylmethyl	
2606	"	4-(2-ethylamino-sulfonylphenyl)-phenylmethyl	
2607	"	4-(2-aminosulfonylphenyl)-phenylmethyl	
2608	"	4-(2-chlorophenyl)-phenylmethyl	
2609	"	4-(2-fluorophenyl)-phenylmethyl	
2610	"	4-(2,4-dichlorophenyl)-phenylmethyl	
2611	"	4-(2,6-dichlorophenyl)-phenylmethyl	
2612	"	4-(3,5-dichlorophenyl)-phenylmethyl	
2613	"	4-(2,3-dichlorophenyl)-phenylmethyl	
2614	"	4-(2-methylphenyl)-phenylmethyl	
2615	"	4-(2-tetrazole-phenyl)-phenylmethyl	
2616	"	4-(2-methoxy-phenyl)-phenylmethyl	
2617	"	4-(2-tmethyl-phenyl)-phenylmethyl	
2618	"	4-(2-formyl-phenyl)-phenylmethyl	
2619	"	4-(2-amino-phenyl)-phenylmethyl	
2620	"	4-(2-methylamino-phenyl)-phenylmethyl	
2621	"	4-(2-ethylamino-phenyl)-phenylmethyl	
2622	"	4-(2-propylamino-phenyl)-phenylmethyl	
2623	"	4-(2-methylsulfonylamino-phenyl)-phenylmethyl	
2624	"	4-(2-trifluoromethylsulfonylamino-phenyl)-phenylmethyl	
2625	"	4-(3-methylphenyl)-phenylmethyl	
2626	"	4-(3-isopropylphenyl)-phenylmethyl	
2627	"	4-(3-trifluoromethylsulfonylamino-phenyl)-phenylmethyl	
2628	"	4-(3-methylsulfonylamino-phenyl)-phenylmethyl	
2629	"	4-(3-amino-phenyl)-phenylmethyl	
2630	"	4-(3-nitro-phenyl)-phenylmethyl	
2631			
2632	CH <sub>3</sub>	H	
2633	"	methyl	

2634	"	ethyl	
2635	"	n-propyl	
2636	"	n-butyl	
2637	"	n-pentyl	
2638	"	n-hexanyl	
2639	"	n-heptanyl	
2640	"	isopropyl	
2641	"	tert-butyl	
2642	"	cyclopropyl	
2643	"	cyclobutanyl	
2644	"	cyclopentanyl	
2645	"	cyclohexanyl	
2646	"	cycloheptanyl	
2647	"	phenyl	
2648	"	phenylmethyl	
2649	"	3-hydroxyphenyl	
2650	"	3-hydroxy-4-methoxyphenyl	
2651	"	3-fluorophenyl	
2652	"	3-chlorophenyl	
2653	"	3-nitrophenyl	
2654	"	3-aminophenyl	
2655	"	3-methyl-sulfonamidephenyl	
2656	"	3-trifluoro-methylsulfonamidephenyl	
2657	"	3-Ac-NHphenyl	
2658	"	3-Boc-NHphenyl	
2659	"	3-Cbz-NHphenyl	
2660	"	3-aminomethylenephenyl	
2661	"	3-aminoethylenephenyl	
2662	"	3-cyanophenyl	
2663	"	3-cyanomethylphenyl	
2664	"	3-hydroxy-methylenephenyl	
2665	"	3-carboxylphenyl	
2666	"	3-mercaptophenyl	
2667	"	3-methoxyphenyl	
2668	"	3,4-methylene-dioxophenyl	
2669	"	3-tetrazolephenyl	
2670	"	3-aminosulfonylphenyl	
2671	"	3-methylamino-sulfonylphenyl	
2672	"	3-ethylamino-sulfonylphenyl	
2673	"	3-tertbutylamino-sulfonylphenyl	
2674	"	3-methylsulfonylphenyl	
2675	"	4-methoxyphenyl	
2676	"	4-phenylphenyl	
2677	"	4-(2-hydroxymethylene-phenyl)-phenyl	
2678	"	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	
2679	"	4-(2-methylamino-sulfonylphenyl)-phenyl	
2680	"	4-(2-ethylamino-sulfonylphenyl)-phenyl	
2681	"	4-(2-aminosulfonyl-phenyl)-phenyl	
2682	"	4-(2-chlorophenyl)-phenyl	
2683	"	4-(2-fluorophenyl)-phenyl	
2684	"	4-(2,4-dichlorophenyl)-phenyl	
2685	"	4-(2,6-dichlorophenyl)-phenyl	

2686	"	4-(3,5-dichlorophenyl)-phenyl	
2687	"	4-(2,3-dichlorophenyl)-phenyl	
2688	"	4-(2-methylphenyl)-phenyl	
2689	"	4-(2-tetrazole-phenyl)-phenyl	
2690	"	4-(2-methoxy-phenyl)-phenyl	
2691	"	4-(2-tmethyl-phenyl)-phenyl	
2692	"	4-(2-formyl-phenyl)-phenyl	
2693	"	4-(2-amino-phenyl)-phenyl	
2694	"	4-(2-methylamino-phenyl)-phenyl	
2695	"	4-(2-ethylamino-phenyl)-phenyl	
2696	"	4-(2-propylamino-phenyl)-phenyl	
2697	"	4-(2-methylsulfonylamino-phenyl)-phenyl	
2698	"	4-(2-trifluoromethylsulfonylamino-phenyl)-phenyl	
2699	"	4-(3-methylphenyl)-phenyl	
2700	"	4-(3-isopropylphenyl)-phenyl	
2701	"	4-(3-trifluoromethylsulfonylamino-phenyl)-phenyl	
2702	"	4-(3-methylsulfonylamino-phenyl)-phenyl	
2703	"	4-(3-amino-phenyl)-phenyl	
2704	"	4-(3-nitro-phenyl)-phenyl	
2705	"	2-pyridyl	
2706	"	3-pyridyl	
2707	"	4-pyridyl	
2708	"	3-amino-4-pyridyl	
2709	"	3-hydroxy-4-pyridyl	
2710	"	3-imidazole	
2711	"	2-nitro-3-imidazole	
2712	"	5-thiazole	
2713	"	5-oxazole	
2714	"	4-pyazole	
2715	"	phenylethyl	
2716	"	2-aminophenylethyl	
2717	"	2-methylsulfonylamino-phenylethyl	
2718	"	2-trifluoromethylsulfonylamino-phenylethyl	
2719	"	2-hydroxymethylene-phenylethyl	
2720	"	2-aminomethylene-phenylethyl	
2721	"	2-tetrazolephenylethyl	
2722	"	2-tertbutylamino-sulfonylphenylethyl	
2723	"	2-aminosulfonyl-phenylethyl	
2724	"	2-methoxyphenylethyl	
2725	"	3-aminophenylethyl	
2726	"	3-methylsulfonylamino-phenylethyl	

2727	"	3-trifluoromethyl- sulfonylamino-phenylethyl	
2728	"	3-hydroxy- methylenephenylethyl	
2729	"	3-aminomethylene- phenylethyl	
2730	"	3-tetrazolephenylethyl	
2731	"	3-tertbutylamino- sulfonylphenylethyl	
2732	"	3-aminosulfonyl-phenylethyl	
2733	"	3-methoxyphenylethyl	
2734	"	4-phenylphenylmethyl	
2735	"	4-(2-hydroxy- methylenephenyl)- phenylmethyl	
2736	"	4-(2-tert- butylaminosulfonyl-phenyl)- phenylmethyl	
2737	"	4-(2-methylamino- sulfonylphenyl)-phenylmethyl	
2738	"	4-(2-ethylamino- sulfonylphenyl)-phenylmethyl	
2739	"	4-(2-aminosulfonyl-phenyl)- phenylmethyl	
2740	"	4-(2-chlorophenyl)- phenylmethyl	
2741	"	4-(2-fluorophenyl)- phenylmethyl	
2742	"	4-(2,4-dichlorophenyl)- phenylmethyl	
2743	"	4-(2,6-dichlorophenyl)- phenylmethyl	
2744	"	4-(3,5-dichlorophenyl)- phenylmethyl	
2745	"	4-(2,3-dichlorophenyl)- phenylmethyl	
2746	"	4-(2-methylphenyl)- phenylmethyl	
2747	"	4-(2-tetrazole-phenyl)- phenylmethyl	
2748	"	4-(2-methoxy-phenyl)- phenylmethyl	
2749	"	4-(2-tmethyl-phenyl)- phenylmethyl	
2750	"	4-(2-formyl-phenyl)- phenylmethyl	
2751	"	4-(2-amino-phenyl)- phenylmethyl	
2752	"	4-(2-methylamino-phenyl)- phenylmethyl	
2753	"	4-(2-ethylamino-phenyl)- phenylmethyl	
2754	"	4-(2-propylamino-phenyl)- phenylmethyl	
2755	"	4-(2-methylsulfonylamino- phenyl)-phenylmethyl	
2756	"	4-(2- trifluoromethylsulfonyl- amino-phenyl)-phenylmethyl	
2757	"	4-(3-methylphenyl)- phenylmethyl	
2758	"	4-(3-isopropylphenyl)- phenylmethyl	



2759	"	4-(3-trifluoromethylsulfonyl-amino-phenyl)-phenylmethyl	
2760	"	4-(3-methylsulfonyl-amino-phenyl)-phenylmethyl	
2761	"	4-(3-amino-phenyl)-phenylmethyl	
2762	"	4-(3-nitro-phenyl)-phenylmethyl	
2763			
2764	3-phenylpropyl	H	
2765	"	methyl	
2766	"	ethyl	
2767	"	n-propyl	
2768	"	n-butyl	
2769	"	n-pentyl	
2770	"	n-hexanyl	
2771	"	n-heptanyl	
2772	"	isopropyl	
2773	"	tert-butyl	
2774	"	cyclopropyl	
2775	"	cyclobutanyl	
2776	"	cyclopentanyl	
2777	"	cyclohexanyl	
2778	"	cycloheptanyl	
2779	"	phenyl	
2780	"	phenylmethyl	
2781	"	3-hydroxyphenyl	
2782	"	3-hydroxy-4-methoxyphenyl	
2783	"	3-fluorophenyl	
2784	"	3-chlorophenyl	
2785	"	3-nitrophenyl	
2786	"	3-aminophenyl	
2787	"	3-methyl-sulfonamidephenyl	
2788	"	3-trifluoro-methylsulfonamidephenyl	
2789	"	3-Ac-NHphenyl	
2790	"	3-Boc-NHphenyl	
2791	"	3-Cbz-NHphenyl	
2792	"	3-aminomethylenephenyl	
2793	"	3-aminoethylenephenyl	
2794	"	3-cyanophenyl	
2795	"	3-cyanomethylphenyl	
2796	"	3-hydroxy-methylenephenyl	
2797	"	3-carboxylphenyl	
2798	"	3-mercaptophenyl	
2799	"	3-methoxyphenyl	
2800	"	3,4-methylene-dioxophenyl	
2801	"	3-tetrazolephenyl	
2802	"	3-aminosulfonylphenyl	
2803	"	3-methylamino-sulfonylphenyl	
2804	"	3-ethylamino-sulfonylphenyl	
2805	"	3-tertbutylamino-sulfonylphenyl	
2806	"	3-methylsulfonylphenyl	
2807	"	4-methoxyphenyl	
2808	"	4-phenylphenyl	
2809	"	4-(2-hydroxy-methylenephenyl)-phenyl	
2810	"	4-(2-tert-butylamino-sulfonylphenyl)-phenyl	

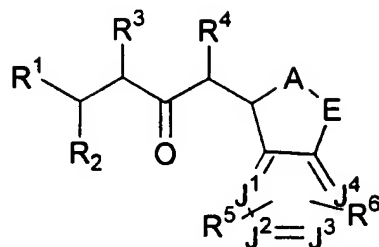
2811	"	4-(2-methylamino-sulfonylphenyl)-phenyl	
2812	"	4-(2-ethylamino-sulfonylphenyl)-phenyl	
2813	"	4-(2-aminosulfonylphenyl)-phenyl	
2814	"	4-(2-chlorophenyl)-phenyl	
2815	"	4-(2-fluorophenyl)-phenyl	
2816	"	4-(2,4-dichlorophenyl)-phenyl	
2817	"	4-(2,6-dichlorophenyl)-phenyl	
2818	"	4-(3,5-dichlorophenyl)-phenyl	
2819	"	4-(2,3-dichlorophenyl)-phenyl	
2820	"	4-(2-methylphenyl)-phenyl	
2821	"	4-(2-tetrazole-phenyl)-phenyl	
2822	"	4-(2-methoxy-phenyl)-phenyl	
2823	"	4-(2-tmethyl-phenyl)-phenyl	
2824	"	4-(2-formyl-phenyl)-phenyl	
2825	"	4-(2-amino-phenyl)-phenyl	
2826	"	4-(2-methylamino-phenyl)-phenyl	
2827	"	4-(2-ethylamino-phenyl)-phenyl	
2828	"	4-(2-propylamino-phenyl)-phenyl	
2829	"	4-(2-methylsulfonyl-amino-phenyl)-phenyl	
2830	"	4-(2-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
2831	"	4-(3-methylphenyl)-phenyl	
2832	"	4-(3-isopropylphenyl)-phenyl	
2833	"	4-(3-trifluoromethylsulfonyl-amino-phenyl)-phenyl	
2834	"	4-(3-methylsulfonyl-amino-phenyl)-phenyl	
2835	"	4-(3-amino-phenyl)-phenyl	
2836	"	4-(3-nitro-phenyl)-phenyl	
2837	"	2-pyridyl	
2838	"	3-pyridyl	
2839	"	4-pyridyl	
2840	"	3-amino-4-pyridyl	
2841	"	3-hydroxy-4-pyridyl	
2842	"	3-imidazole	
2843	"	2-nitro-3-imidazole	
2844	"	5-thiazole	
2845	"	5-oxazole	
2846	"	4-pyazole	
2847	"	phenylethyl	
2848	"	2-aminophenylethyl	
2849	"	2-methylsulfonylamino-phenylethyl	
2850	"	2-trifluoromethylsulfonylamino-phenylethyl	

2851	"	2-hydroxymethylene-phenylethyl	
2852	"	2-aminomethylene-phenylethyl	
2853	"	2-tetrazolephenylethyl	
2854	"	2-tert-butylamino-sulfonylphenylethyl	
2855	"	2-aminosulfonyl-phenylethyl	
2856	"	2-methoxyphenylethyl	
2857	"	3-aminophenylethyl	
2858	"	3-methylsulfonylamino-phenylethyl	
2859	"	3-trifluoromethylsulfonylamino-phenylethyl	
2860	"	3-hydroxymethylene-phenylethyl	
2861	"	3-aminomethylene-phenylethyl	
2862	"	3-tetrazolephenylethyl	
2863	"	3-tertbutylamino-sulfonylphenylethyl	
2864	"	3-aminosulfonyl-phenylethyl	
2865	"	3-methoxyphenylethyl	
2866	"	4-phenylphenylmethyl	
2867	"	4-(2-hydroxymethylene-phenyl)-phenylmethyl	
2868	"	4-(2-tert-butylaminosulfonyl-phenyl)-phenylmethyl	
2869	"	4-(2-methylaminosulfonyl-phenyl)-phenylmethyl	
2870	"	4-(2-ethylaminosulfonyl-phenyl)-phenylmethyl	
2871	"	4-(2-aminosulfonylphenyl)-phenylmethyl	
2872	"	4-(2-chlorophenyl)-phenylmethyl	
2873	"	4-(2-fluorophenyl)-phenylmethyl	
2874	"	4-(2,4-dichlorophenyl)-phenylmethyl	
2875	"	4-(2,6-dichlorophenyl)-phenylmethyl	
2876	"	4-(3,5-dichlorophenyl)-phenylmethyl	
2877	"	4-(2,3-dichlorophenyl)-phenylmethyl	
2878	"	4-(2-methylphenyl)-phenylmethyl	
2879	"	4-(2-tetrazole-phenyl)-phenylmethyl	
2880	"	4-(2-methoxy-phenyl)-phenylmethyl	
2881	"	4-(2-tmethyl-phenyl)-phenylmethyl	
2882	"	4-(2-formyl-phenyl)-phenylmethyl	
2883	"	4-(2-amino-phenyl)-phenylmethyl	
2884	"	4-(2-methylamino-phenyl)-phenylmethyl	

2885	"	4-(2-ethylamino-phenyl)- phenylmethyl	
2886	"	4-(2-propylamino-phenyl)- phenylmethyl	
2887	"	4-(2-methylsulfonylamino- phenyl)-phenylmethyl	
2888	"	4-(2- trifluoromethylsulfonyl- amino-phenyl)-phenylmethyl	
2889	"	4-(3-methylphenyl)- phenylmethyl	
2890	"	4-(3-isopropylphenyl)- phenylmethyl	
2891	"	4-(3- trifluoromethylsulfonyl- amino-phenyl)-phenylmethyl	
2892	"	4-(3-methylsulfonylamino- phenyl)-phenylmethyl	
2893	"	4-(3-amino-phenyl)- phenylmethyl	
2894	"	4-(3-nitro-phenyl)- phenylmethyl	

What is claimed:

1. A compound of the formula I:



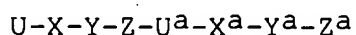
Formula I

or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

$R^1$  is selected from:

-CO<sub>2</sub>H, -C(O)NHOH, -C(O)NHR<sup>7</sup>, -SH, -CH<sub>2</sub>CO<sub>2</sub>R<sup>7</sup>,  
 -COR<sup>7</sup>, -N(OH)COR<sup>7</sup>, -SN<sub>2</sub>H<sub>2</sub>R<sup>7</sup>, -SONHR<sup>7</sup>, -CH<sub>2</sub>CO<sub>2</sub>H,  
 -PO(OH)<sub>2</sub>, -PO(OH)NHR<sup>7</sup>, -CH<sub>2</sub>SH, -C(O)NHR<sup>7</sup>, -CO<sub>2</sub>R<sup>7</sup>,  
 and common prodrug derivatives;

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
 OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
 NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
 and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10  
 alkenylene, C<sub>2</sub>-10 alkynylene;

Y is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S(O)}_p$ , and  $\text{C(O)}$ ;

Z is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5  $\text{R}^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $\text{R}^b$ ;

$\text{U}^a$  is absent or is selected from: H, O,  $\text{NR}^a$ ,  $\text{C(O)}$ ,  $\text{C(O)O}$ ,  $\text{OC(O)}$ ,  $\text{C(O)NR}^a$ ,  $\text{NR}^a\text{C(O)}$ ,  $\text{OC(O)O}$ ,  $\text{OC(O)NR}^a$ ,  $\text{NR}^a\text{C(O)O}$ ,  $\text{NR}^a\text{C(O)NR}^a$ ,  $\text{S(O)}_p$ ,  $\text{S(O)}_p\text{NR}^a$ ,  $\text{NR}^a\text{S(O)}_p$ , and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

$\text{X}^a$  is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;

$\text{Y}^a$  is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S(O)}_p$ , and  $\text{C(O)}$ ;

$\text{Z}^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5  $\text{R}^c$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $\text{R}^c$ ;

$\text{R}^a$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

$\text{R}^{a'}$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

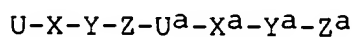
alternatively,  $\text{R}^a$  and  $\text{R}^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional

heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>c</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>3</sup> is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

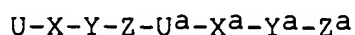
R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;



$R^c$ , at each occurrence, is independently selected from  $C_{1-6}$  alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^a'$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^a'$ ,  $NR^aS(O)_2R^a'$ ,  $S(O)_2NR^aR^a'$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^4$  is selected from:  
hydrogen,  $(C_{1-5})$ alkyl,  $(C_{1-5})$ alkyl-aryl,

$R^5$  and  $R^6$  are independently selected from:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$  alkenylene,  $C_{2-10}$  alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

Z is absent or selected from H, a  $C_{3-13}$  carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>,

$C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^a'$ ,  $NR^aS(O)_2R^a'$ ,  $S(O)_2NR^aR^a'$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^7$  is selected from:  $C_1$ - $C_{10}$  alkyl, alkylaryl, and common prodrug derivatives

A is selected from:  
 $SO_2$ , SO, CHOH;

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,  
wherein W can be absent or selected from:  
 $CH_2$ , CO, O,  $S(O)_m$  and  $NR^{10}$ ,  
m is 0-2,  
n is 0-2;

with the proviso that when W is O, S or  $NR^{10}$  then  
m must not be 0;

$R^8$  and  $R^9$  is independently selected from:  
H,  
C1-C8 alkyl substituted with 0-5  $R^b$ ,  
C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5  $R^b$ ,  
C3-13 carbocyclic residue substituted with 0-5  $R^b$ ,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group consisting  
of N, O, and S substituted with 0-5  $R^b$ ;  
amino,  
C1-C8 alkyl- $NR^{10}$   
hydroxyl,

$R^8$  and  $R^9$  can also form a ring interrupted by  $NR^{10}$ , O,  
 $S(O)_m$ .

R<sup>10</sup> is selected from:

hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

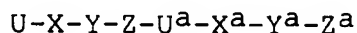
with no more than two N in the cycle.

2. A compound of claim 1 wherein:

R<sup>1</sup> is selected from:

-CO<sub>2</sub>H, -C(O)NHOH, -C(O)NHOR<sup>7</sup>, -SH, -CH<sub>2</sub>CO<sub>2</sub>R<sup>7</sup>,  
-COR<sup>7</sup>, -N(OH)COR<sup>7</sup>, -SN<sub>2</sub>H<sub>2</sub>R<sup>7</sup>, -SONHR<sup>7</sup>, -CH<sub>2</sub>CO<sub>2</sub>H,  
-PO(OH)<sub>2</sub>, -PO(OH)NHR<sup>7</sup>, -CH<sub>2</sub>SH, -C(O)NHOR<sup>7</sup>, -CO<sub>2</sub>R<sup>7</sup>,  
and common prodrug derivatives;

R<sup>2</sup> is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O,  
OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>,  
NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>,  
and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and  
C(O);

Z is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

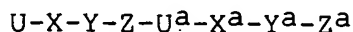
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^c$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

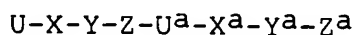
R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>,

NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', NR<sup>a</sup>S(O)<sub>2</sub>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA', S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>4</sup> is selected from:  
hydrogen,

R<sup>5</sup> and R<sup>6</sup> are independently selected from:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;



X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^7$  is selected from:  $C_1$ - $C_{10}$  alkyl, alkylaryl, and common prodrug derivatives

A is selected from:  
 $SO_2$ , SO, CHOH;

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,  
wherein W can be absent or selected from:  
 $CH_2$ , CO, O,  $S(O)_m$  and  $NR^{10}$ ,  
m is 0-2,  
n is 0-2;

with the proviso that when W is O, S or  $NR^{10}$  then  
m must not be 0;

$R^8$  and  $R^9$  is independently selected from:  
H,  
C1-C8 alkyl substituted with 0-5  $R^b$ ,  
C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5  $R^b$ ,  
C3-13 carbocyclic residue substituted with 0-5  $R^b$ ,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group consisting  
of N, O, and S substituted with 0-5  $R^b$ ;  
amino,  
C1-C8 alkyl- $NR^{10}$   
hydroxyl,

$R^8$  and  $R^9$  can also form a ring interrupted by  $NR^{10}$ , O,  
 $S(O)_m$ .

$R^{10}$  is selected from:  
hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

$J^1, J^2, J^3, J^4$  are independently selected from:

CH, or N.

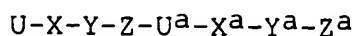
with no more than two N in the cycle.

3. A compound of claim 1 wherein:

$R^1$  is selected from:

$-\text{CO}_2\text{H}$ ,  $-\text{C}(\text{O})\text{NHOH}$ ,  $-\text{C}(\text{O})\text{NHO}R^7$ ,  $-\text{SH}$ ,  $-\text{CH}_2\text{CO}_2R^7$ ,  
and common prodrug derivatives;

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  $\text{C}(\text{O})\text{O}$ ,  
 $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub>  
alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $\text{NR}^a$ ,  $\text{S}(\text{O})_p$ , and  
 $\text{C}(\text{O})$ ;

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14  
membered heterocyclic system containing from 1-4  
heteroatoms selected from the group consisting of  
N, O, and S substituted with 0-5  $R^b$ ;

$\text{U}^a$  is absent or is selected from: H, O,  $\text{NR}^a$ ,  $\text{C}(\text{O})$ ,  
 $\text{C}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})$ ,  $\text{C}(\text{O})\text{NR}^a$ ,  $\text{NR}^a\text{C}(\text{O})$ ,  $\text{OC}(\text{O})\text{O}$ ,  $\text{OC}(\text{O})\text{NR}^a$ ,  
 $\text{NR}^a\text{C}(\text{O})\text{O}$ ,  $\text{NR}^a\text{C}(\text{O})\text{NR}^a$ ,  $\text{S}(\text{O})_p$ ,  $\text{S}(\text{O})_p\text{NR}^a$ ,  $\text{NR}^a\text{S}(\text{O})_p$ ,  
and  $\text{NR}^a\text{SO}_2\text{NR}^a$ ;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

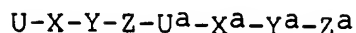
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

$x^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

$y^a$  is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

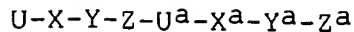
alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>4</sup> is selected from:  
hydrogen,

R<sup>5</sup> and R<sup>6</sup> are independently selected from:



wherein:

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

$X^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

$Y^a$  is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

$Z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^c$  and a 5-14 membered heterocyclic system containing from 1-4



heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^7$  is selected from: C<sub>1</sub>-C<sub>10</sub> alkyl, alkylaryl, and common prodrug derivatives

A is selected from:  
SO<sub>2</sub>, SO, CHOH;

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,

wherein W can be absent or selected from:  
CH<sub>2</sub>, CO, O,  $S(O)_m$  and  $NR^{10}$ ,

m is 0-2,

n is 0-2;

with the proviso that when W is O, S or NR<sup>10</sup> then  
m must not be 0;

R<sup>8</sup> and R<sup>9</sup> is independently selected from:

H,  
C1-C8 alkyl substituted with 0-5 R<sup>b</sup>,  
C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,  
C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group consisting  
of N, O, and S substituted with 0-5 R<sup>b</sup>;  
amino,  
C1-C8 alkyl-NR<sup>10</sup>  
hydroxyl,

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)m.

R<sup>10</sup> is selected from:

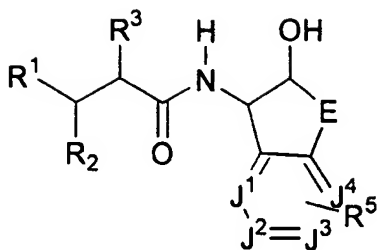
hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

with no more than two N in the cycle.

4. A compound of the formula II:



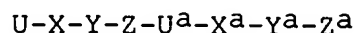
Formula II

or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

$R^1$  is selected from:

$-CO_2H$ ,  $-C(O)NHOH$ ,  $-C(O)NHOR^7$ ,  $-SH$ ,  $-CH_2CO_2R^7$ ,  
and common prodrug derivatives;

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  
 $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  
 $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ ,  
and  $NR^aSO_2NR^a$ ;

X is absent or selected from H,  $C_{1-10}$  alkylene,  $C_{2-10}$   
alkenylene,  $C_{2-10}$  alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  
 $C(O)$ ;

Z is absent or selected from H, a  $C_{3-13}$  carbocyclic  
residue substituted with 0-5  $R^b$  and a 5-14  
membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1</sub>-10 alkylene, C<sub>2</sub>-10 alkenylene, C<sub>2</sub>-10 alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

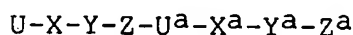
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C1-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C1-10 alkylene, C2-10 alkenylene, C2-10 alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

Z is absent or selected from H, a C3-13 carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

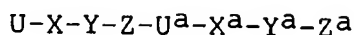
alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S;

R<sup>5</sup> is selected from:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

$Z^a$  is absent or selected from H, a C<sub>3</sub>-13 carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1</sub>-4 alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C<sub>1</sub>-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^7$  is selected from: C<sub>1</sub>-C<sub>10</sub> alkyl, alkylaryl, and common prodrug derivatives

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,

wherein W can be absent or selected from:  
CH<sub>2</sub>, CO, O,  $S(O)_m$  and  $NR^{10}$ ,



m is 0-2,  
n is 0-2;

with the proviso that when W is O, S or NR<sup>10</sup> then  
m must not be 0;

R<sup>8</sup> and R<sup>9</sup> is independently selected from:

H,  
C1-C8 alkyl substituted with 0-5 R<sup>b</sup>,  
C1-C8 alkenyl,  
C1-C8 alkylaryl substituted with 0-5 R<sup>b</sup>,  
C3-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
5-14 membered heterocyclic system containing from  
1-4 heteroatoms selected from the group consisting  
of N, O, and S substituted with 0-5 R<sup>b</sup>;  
amino,  
C1-C8 alkyl-NR<sup>10</sup>  
hydroxyl,

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
S(O)m.

R<sup>10</sup> is selected from:

hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

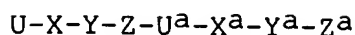
with no more than two N in the cycle.

5. A compound of claim 4 wherein:

R<sup>1</sup> is selected from:

-C(O)NHOH,  
and common prodrug derivatives;

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

$U^a$  is absent or is selected from: H, O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

$X^a$  is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

$Y^a$  is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

$Z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

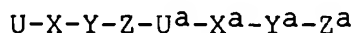
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>3</sup> is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

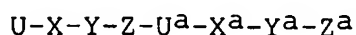
$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^5$  is selected from:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from  $C_{1-6}$  alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ , and  $CF_2CF_3$ ;

$R^c$ , at each occurrence, is independently selected from  $C_{1-6}$  alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^7$  is selected from:  $C_1-C_{10}$  alkyl, alkylaryl, and common prodrug derivatives

E is  $(CR^8R^9)_m-W-(CR^8R^9)_n$ ,

wherein W can be absent or selected from:

$CH_2$ , CO, O,  $S(O)_m$  and  $NR^{10}$ ,

m is 0-2,

n is 0-2;

with the proviso that when W is O, S or  $NR^{10}$  then m must not be 0;

$R^8$  and  $R^9$  is independently selected from:

H,

$C_{1-8}$  alkyl substituted with 0-5  $R^b$ ,

$C_{1-8}$  alkenyl,

$C_{1-8}$  alkylaryl substituted with 0-5  $R^b$ ,

C<sub>3</sub>-13 carbocyclic residue substituted with 0-5 R<sup>b</sup>,  
 5-14 membered heterocyclic system containing from  
 1-4 heteroatoms selected from the group consisting  
 of N, O, and S substituted with 0-5 R<sup>b</sup>;  
 amino,  
 C<sub>1</sub>-C<sub>8</sub> alkyl-NR<sup>10</sup>  
 hydroxyl,

R<sup>8</sup> and R<sup>9</sup> can also form a ring interrupted by NR<sup>10</sup>, O,  
 S(O)<sub>m</sub>.

R<sup>10</sup> is selected from:

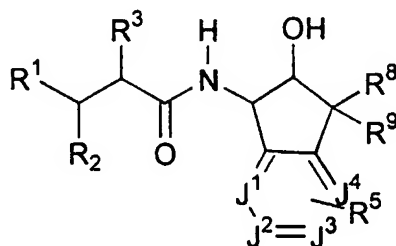
hydrogen,  
 C<sub>1</sub>-C<sub>8</sub> alkyl  
 C<sub>1</sub>-C<sub>8</sub> alkylaryl

J<sup>1</sup>, J<sup>2</sup>, J<sup>3</sup>, J<sup>4</sup> are independently selected from:

CH, or N.

with no more than two N in the cycle.

6. A compound of formula III wherein:



Formula III

or a pharmaceutically acceptable salt form or a  
 stereoisomer thereof, wherein:

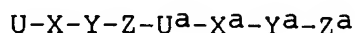


R<sup>1</sup> is selected from:

-C(O)NHOH

and common prodrug derivatives;

R<sup>2</sup> is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

$Y^a$  is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

$Z^a$  is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^C$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^C$ ;

$R^a$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

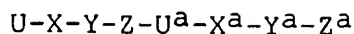
$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4

heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

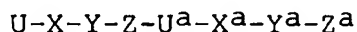
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

R<sup>C</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>R<sup>a'</sup>, C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>R<sup>a'</sup>, NR<sup>a</sup>S(O)<sub>2</sub>R<sup>a'</sup>, S(O)<sub>2</sub>NR<sup>a</sup>R<sup>a'</sup>, S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

R<sup>5</sup> is selected from:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

$R^{a'}$ , at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^8$  and  $R^9$  is independently selected from:

H,  
C<sub>1-8</sub> alkyl substituted with 0-5  $R^b$ ,  
C<sub>1-8</sub> alkenyl,  
C<sub>1-8</sub> alkylaryl substituted with 0-5  $R^b$ ,  
C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$ ,  
5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;  
amino,  
C<sub>1-8</sub> alkyl-NR<sup>10</sup>  
hydroxyl,

$R^8$  and  $R^9$  can also form a ring interrupted by  $NR^{10}$ , 0,  $S(O)m$ .

$R^{10}$  is selected from:

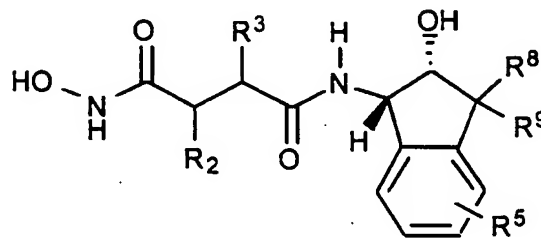
hydrogen,  
C1-C8 alkyl  
C1-C8 alkylaryl

$J^1, J^2, J^3, J^4$  are independently selected from:

CH, or N.

with no more than two N in the cycle.

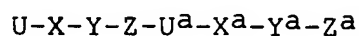
7. A compound of the formula IV:



IV

or a pharmaceutically acceptable salt form or a stereoisomer thereof, wherein:

$R^2$  is selected from the formula:



wherein:

U is absent or is selected from: O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

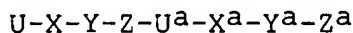


alternatively,  $R^a$  and  $R^{a'}$  taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C1-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ , and  $CF_2CF_3$ ;

$R^c$ , at each occurrence, is independently selected from C1-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^3$  is selected from the formula:



wherein:

U is absent or is selected from: O,  $NR^a$ ,  $C(O)$ ,  $C(O)O$ ,  $OC(O)$ ,  $C(O)NR^a$ ,  $NR^aC(O)$ ,  $OC(O)O$ ,  $OC(O)NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ ,  $S(O)_p$ ,  $S(O)_pNR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C1-10 alkylene, C2-10 alkenylene, C2-10 alkynylene;

Y is absent or selected from H, O,  $NR^a$ ,  $S(O)_p$ , and  $C(O)$ ;

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>b</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>b</sup>;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>c</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>c</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

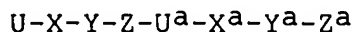
R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

$R^b$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^c$ , at each occurrence, is independently selected from C<sub>1-6</sub> alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN, NO<sub>2</sub>,  $NR^aR^{a'}$ , C(O) $R^a$ , C(O) $OR^a$ , C(O) $NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ , S(O)<sub>2</sub> $NR^aR^{a'}$ , S(O)<sub>p</sub> $R^a$ , CF<sub>3</sub>, CF<sub>2</sub>CF<sub>3</sub>, and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^5$  is selected from:



wherein:

U is absent or is selected from: O,  $NR^a$ , C(O), C(O)O, OC(O), C(O) $NR^a$ ,  $NR^aC(O)$ , OC(O)O, OC(O) $NR^a$ ,  $NR^aC(O)O$ ,  $NR^aC(O)NR^a$ , S(O)<sub>p</sub>, S(O)<sub>p</sub> $NR^a$ ,  $NR^aS(O)_p$ , and  $NR^aSO_2NR^a$ ;

X is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y is absent or selected from H, O,  $NR^a$ , S(O)<sub>p</sub>, and C(O);

Z is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5  $R^b$  and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5  $R^b$ ;

U<sup>a</sup> is absent or is selected from: H, O, NR<sup>a</sup>, C(O), C(O)O, OC(O), C(O)NR<sup>a</sup>, NR<sup>a</sup>C(O), OC(O)O, OC(O)NR<sup>a</sup>, NR<sup>a</sup>C(O)O, NR<sup>a</sup>C(O)NR<sup>a</sup>, S(O)<sub>p</sub>, S(O)<sub>p</sub>NR<sup>a</sup>, NR<sup>a</sup>S(O)<sub>p</sub>, and NR<sup>a</sup>SO<sub>2</sub>NR<sup>a</sup>;

X<sup>a</sup> is absent or selected from H, C<sub>1-10</sub> alkylene, C<sub>2-10</sub> alkenylene, C<sub>2-10</sub> alkynylene;

Y<sup>a</sup> is absent or selected from H, O, NR<sup>a</sup>, S(O)<sub>p</sub>, and C(O);

Z<sup>a</sup> is absent or selected from H, a C<sub>3-13</sub> carbocyclic residue substituted with 0-5 R<sup>C</sup> and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S substituted with 0-5 R<sup>C</sup>;

R<sup>a</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

R<sup>a'</sup>, at each occurrence, is independently selected from H, C<sub>1-4</sub> alkyl, phenyl or benzyl;

alternatively, R<sup>a</sup> and R<sup>a'</sup> taken together with the nitrogen to which they are attached form a 5 or 6 membered ring containing from 0-1 additional heteroatoms selected from the group consisting of N, O, and S;

R<sup>b</sup>, at each occurrence, is independently selected from C<sub>1-6</sub> alkyl, OR<sup>a</sup>, Cl, F, Br, I, =O, CN, NO<sub>2</sub>, NR<sup>a</sup>RA', C(O)R<sup>a</sup>, C(O)OR<sup>a</sup>, C(O)NR<sup>a</sup>RA', S(O)<sub>2</sub>NR<sup>a</sup>RA', S(O)<sub>p</sub>R<sup>a</sup>, CF<sub>3</sub>, and CF<sub>2</sub>CF<sub>3</sub>;

$R^C$ , at each occurrence, is independently selected from C1-6 alkyl,  $OR^a$ , Cl, F, Br, I, =O, CN,  $NO_2$ ,  $NR^aR^{a'}$ ,  $C(O)R^a$ ,  $C(O)OR^a$ ,  $C(O)NR^aR^{a'}$ ,  $NR^aS(O)_2R^{a'}$ ,  $S(O)_2NR^aR^{a'}$ ,  $S(O)_pR^a$ ,  $CF_3$ ,  $CF_2CF_3$ , and a 5-14 membered heterocyclic system containing from 1-4 heteroatoms selected from the group consisting of N, O, and S;

$R^8$  and  $R^9$  is independently selected from:

H,  
 C1-C8 alkyl substituted with 0-5  $R^b$ ,  
 C1-C8 alkenyl,  
 C1-C8 alkylaryl substituted with 0-5  $R^b$ ,  
 C3-13 carbocyclic residue substituted with 0-5  $R^b$ ,  
 5-14 membered heterocyclic system containing from  
 1-4 heteroatoms selected from the group  
 consisting of N, O, and S substituted with 0-5  $R^b$ ;  
 amino,  
 C1-C8 alkyl- $NR^{10}$   
 hydroxyl,

$R^8$  and  $R^9$  can also form a ring interrupted by  $NR^{10}$ , O,  
 $S(O)_m$ .

$R^{10}$  is selected from:

hydrogen,  
 C1-C8 alkyl  
 C1-C8 alkylaryl

8. A compound of claim 1, selected from the group  
 consisting of:

N1-(2(R)-hydroxy-1(S)-indanyl)- N4-hydroxy-2(R)-  
 isobutyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)- N4-hydroxy-2(R)-  
 isobutyl-3(S)-(5-hydroxycarbonyl)-pentanamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-methyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-propyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-hexyl-3(S)-propyl-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-methoxy-phenyl)methyl]butanediamide;

N1-[1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-phenyl-propyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy)-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(benzyloxy)-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(fluoro-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3,4-(methylenedioxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(methoxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tert-butylaminosulfonyl-phenyl)phenyl)methyl]-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[(3-hydroxy-4-methoxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(3-thiophene)isoxazoline)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-chloro-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-benzofuran)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3,4-(methylenedioxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tetrazole-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-methyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(amino-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy-carbonyl)amino]phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-hydroxymethylene)phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4,5-trimethoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-di-methoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,5-di-chloro-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-isopropyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-dichloro-phenyl)phenyl)methyl]butanediamide;



N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-chloro-4-fluoro-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(p-toluenesulfonyl-amino)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4-methylenedioxyphenyl)phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-methoxyphenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-fluorophenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(fluoro-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-nitrophenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-(methylsulfonyl-amino)-phenyl)phenyl)methyl]-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-trimethylsilyl-propyl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propionamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(ethyloxy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-butyloxy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(propionamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(methylsulfonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-amino-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(methylsulfonylamino)-phenyl)methyl]-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-(5-hydroxycarbonyl)-pentanamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-methyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-isobutyl-3(S)-propyl-butanediamide;

N1-(2(R)-hydroxy-1(S)-indanyl)-N4-hydroxy-2(R)-hexyl-3(S)-propyl-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-methoxy-phenyl)methyl]butanediamide;

N1-[1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-phenyl-propyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy)-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(benzyloxy)-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(hydroxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(fluoro-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3,4-(methylenedioxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(methoxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tert-butylaminosulfonyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[(3-hydroxy-4-methoxy-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-(3-thiophene)isoxazoline]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-chloro-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-benzofuran)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-methyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3,4-(methylenedioxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-tetrazole-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[3-methyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4-(amino-phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(benzyloxy-carbonyl)amino]phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-hydroxymethylene)phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4,5-trimethoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-di-methoxy-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,5-di-chloro-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2-trifluoromethyl-phenyl)phenyl)methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-isopropyl-phenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(2,4-dichloro-phenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-chloro-4-fluoro-phenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(p-toluenesulfonyl-amino)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-phenylmethyl-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3,4-methylenedioxyphenyl)phenyl]methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-methoxyphenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-fluorophenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(fluoro-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(tert-butylxoy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-nitrophenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[[4-(3-(methylsulfonyl-amino)-phenyl)phenyl]methyl]butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-trimethylsilyl-propyl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethyl-propionamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(ethyloxy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-butyloxy-carbonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(propionamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(methylsulfonyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-amino-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclobutane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-hydroxymethyl-isobutanamide)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-hydroxyl-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-phenyl-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-cyano-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-phenyl-cyclopentane carboxamido-1-yl)-butanediamide;



N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclohexane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-indole carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-furan carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-quinoline carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3,4,5-trimethoxy benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-3-amino-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-6-amino-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-pyridine carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-(2,4-dichloro-phenyl)-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-(4-chloro-phenyl)-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(3-cyano-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(6-quinoline carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-ethyl, 3-methyl-pyrazole 5-carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3-(4-morpholino-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-chloro-4-methylsulfonyl)-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(imidazol-1-yl)benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-thiophene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-tert-butyl,3-methyl-pyrazole 5- carboxamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-aminomethyl benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-hydroxyl-isobutanamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopentane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-cyclopentyl acetamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-( cyclohexane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(4-N-Boc-piperazinyl-1-yl)benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-(piperazinyl-1-yl)benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-Fluoro-6-chloro-benzene carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-amino-cyclohexane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylthio-acetamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methoxy-acetamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-allyl-cyclopentane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-n-propyl-cyclopentane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-allyl-cyclopropane carboxamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(8-quinoline-sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(4-nitro-benzene sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1,4-di-methyl-2-chloro-pyrazole-3- sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1,5-dimethyl-isooxazole 3- sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-imidazole 3-sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzene sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1,4-dimethyl pyrazole 3-sulfonamido)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methylsulfonyl benzene sulfonamido-1-yl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclohexylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(iso-propylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[4(2-trifluoromethylphenyl)-phenylmethyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopentylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(cyclopropylmethyl)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(benzylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-furanmethylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-4-methylphenyl)methyl]-3(S)-(3-cyanophenylmethylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2,2-dimethylpropyl-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-pentylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(bis-cyclopropylmethy-amino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-thiophenemethylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(2-methyl-propylamino)-butanediamide;

N1-[2(R)-hydroxy-1(S)-indanyl]-N4-hydroxy-2(R)-[3-(hydroxy-phenyl)methyl]-3(S)-(1-methyl-cyclopropane carboxamido-1-yl)-butanediamide;

9. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 1.

10. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 2.

11. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 3.

12. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 4.

13. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a

therapeutically effective amount of a compound of Claim 5.

14. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 6.

15. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 7.

16. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 8.

17. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1.

18. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 2.

19. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 3.

20. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in



need of such treatment a therapeutically effective amount of a compound of Claim 4.

21. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 5.

22. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 6.

23. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 7.

24. A method of treating an inflammatory disease in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 8.

25. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1.

26. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 2.

27. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 3.

28. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 4.

29. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 5.

30. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 6.

31. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 7.

32. A method of treating a condition or disease mediated by MMPs and/or TNF and/or aggrecanase in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 8.

33. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1.

34. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 2.

35. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 3.

36. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal

comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 4.

37. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 5.

38. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 6.

39. A method of treating a condition or disease wherein the disease or condition is referred to as rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 7.

40. A method of treating a condition or disease wherein the disease or condition is referred to as

rheumatoid arthritis, osteoarthritis, periodontitis, gingivitis, corneal ulceration, solid tumor growth and tumor invasion by secondary metastases, neovascular glaucoma, multiple sclerosis, or psoriasis in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 8.

41. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 1.

42. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 2.

43. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such

treatment a therapeutically effective amount of a compound of Claim 3.

44. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 4.

45. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 5.

46. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 6.

47. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation,

cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 7.

48. A method of treating a condition or disease wherein the disease or condition is referred to as fever, cardiovascular effects, hemorrhage, coagulation, cachexia, anorexia, alcoholism, acute phase response, acute infection, shock, graft versus host reaction, autoimmune disease or HIV infection in a mammal comprising administering to the mammal in need of such treatment a therapeutically effective amount of a compound of Claim 8.